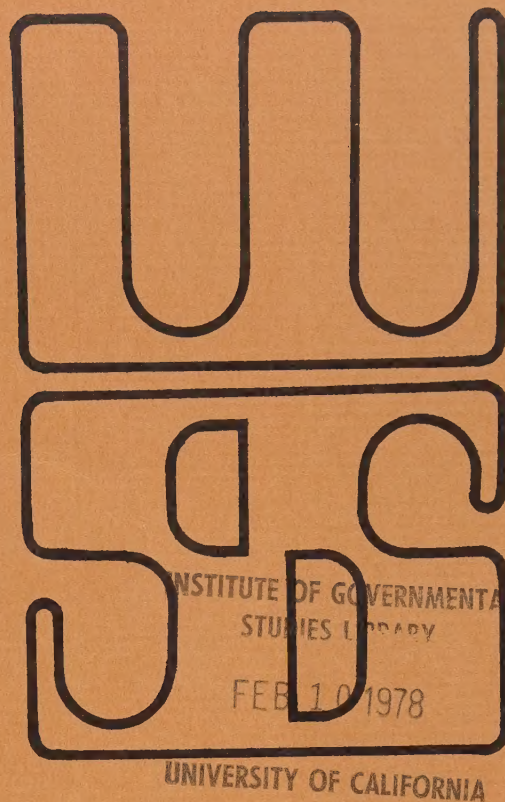


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# INSTITUTIONAL FACTORS



**SAN FRANCISCO  
Bay Region**

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**Wastewater  
Solids Study**

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SAN FRANCISCO BAY REGION  
WASTEWATER SOLIDS STUDY

TASK REPORT 3-7.4  
,  
INSTITUTIONAL FACTORS

JULY 29, 1977

*Sewage sludge — CA — SF metro  
area*

*no diff*

By: [ENVIRONMENTAL IMPACT  
PLANNING CORPORATION]

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## SECTION I INTRODUCTION

### A. OBJECTIVE

The comprehensive objective of Task 3-7.4 is to develop legislative, planning, political, regulatory, and social information for the Wastewater Solids Study. Public issues and public acceptance factors are to be identified.

### B. ORGANIZATION OF THE REPORT

This task report has four major parts. In the first two parts legal and regulatory considerations of the Wastewater Solids Study are examined: the legal review process for the Regional Plan (Task 5) and the ensuing Project Report/EIR/EIS (Task 7); and administrative and institutional considerations including Federal, State, and local legislation, the major institutions and administrative agencies with potential influence on the Wastewater Solids Study, and common law nuisance considerations. This second part, Section IV, has been developed so that it may be inserted into Chapter 4 of the Project Report/EIR/EIS.

The third part is a list of concerned groups and organizations in the study area identified to date. This list is continually being refined and should be regarded as the first attempt in identifying parties concerned with planning treatment and disposal of wastewater solids.

The fourth part summarizes the variety of public concerns about the wastewater solids treatment program in the Bay Area and provides an analysis of political feasibility and public acceptance factors.

### C. METHODOLOGY

#### 1. Review Process for the Wastewater Solids Study

Legislation pertaining to the process of reviewing environmental impact assessments, reports (EIRs), and statements (EISs) was reviewed on the Federal, State, and local (county and city) levels. Regulations developed by governmental institutions and agencies on the review process for environmental impact assessments were also examined.



## 2. Existing Institutional Factors

a. Legislation. The methodology for this subsection involved an investigation of existing waste and wastewater solids plans and EIRs for California and the Bay Area. Health and planning officials in each of the nine counties in the study area were interviewed. New Federal legislation applicable to the project was investigated. A legal search of relevant common law nuisance was conducted in the Hastings Law School Library.

b. Institutions and Administrative Agencies, Jurisdictional Factors, and Planning Requirements. Regulatory and planning agencies were identified by an extensive search of environmental legislation, use of the United States Government Manual, the California Handbook, regional studies completed in wastewater solids management, planning studies related to solid waste, and review of the ABAG survey of governmental jurisdiction related to environmental management.

## 3. Concerned Groups and Organizations

Individuals and organizations were identified through interviews with representatives from nine wastewater treatment agencies and personnel responsible for preparation of the solid waste studies for the nine Bay Area Counties; reviewing membership of wastewater solids study advisory committees; and examining the membership of the various advisory committees for the nine-county solid waste plans.

## 4. Public Concerns About Treatment of Wastewater Solids

The assessment of political acceptability and public concern about the treatment of wastewater solids proceeded with a series of interviews with representatives of wastewater treatment agencies and County Departments of Public Works/Planning. Members of EIP and the Wastewater Solids Study Staff conducted twelve interviews with wastewater treatment agencies, and nine interviews with County officials responsible for the solid waste plans in their respective counties.



## SECTION II

### SUMMARY

This task addresses the legislative and regulatory constraints that might affect wastewater solids planning and treatment, identifies parties potentially interested in the Wastewater Solids Study, analyzes public awareness and acceptance of a regional plan, and deals with the political feasibility of the study and the various options to wastewater solids treatment. The review processes for the Wastewater Solids Study's environmental assessments, EIS, and EIR are also described.

#### A. REVIEW PROCESS

The Wastewater Solids Study will have to comply with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The State Water Resources Control Board, the East Bay Municipal Utility District, and the U.S. Environmental Protection Agency oversee compliance of the study with NEPA/CEQA and respective agency guidelines. The Draft and Final Project Report/EIR/EIS will also be subject to the A-95 review process conducted by the Association of Bay Area Governments and the State.

Although NEPA and CEQA guidelines are basically similar, the Project Report/EIR/EIS will have to conform with both sets of regulations, and the differences in format and level of detail must be carefully noted in the preparation of the report.

The environmental impact assessment on the Regional Plan (as opposed to the Project Report/EIR/EIS) will not be a legally-required review document, and it is recommended that it be titled, "An Environmental Assessment of the Regional Plan" to clarify its official, legal status. This document will, however, be the basis for the official Project Report/EIR/EIS; it should conform strictly to NEPA/CEQA guidelines and be readable and concise, understandable to the lay public.

#### B. EXISTING INSTITUTIONAL FACTORS

##### 1. Federal, State, and Local Legislation

Major laws directly or indirectly affecting the management of wastewater solids in the Bay Region include the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500), under which the Wastewater Solids Study is funded; NEPA and CEQA, which require environmental impact analyses; the Clean Air Act, with which incineration and pyrolysis disposal operations must comply; the Marine Protection, Research and Sanctuaries Act, which prohibits ocean dumping of wastewater solids; the Resources Conservation and

Recovery Act of 1976, under which sewage wastewater solids could possibly be defined as "hazardous waste;" the California Porter-Cologne Water Quality Control Act; the Solid Waste Management and Resource Recovery Act; State legislation allowing for the formation of special districts for wastewater solids and solid waste disposal; and proposed EPA and State Department of Health regulations on wastewater solids.

Local legislation related to solid waste management may have some bearing on the Wastewater Solids Study, and a sample is provided in Section IV.D. Several counties restrict the importation of liquid and solid wastes from other areas (Marin, Sonoma, and San Mateo); others (Napa and Solano) discourage the action but have no ordinances providing movement of wastes across county lines.

## 2. Common Law Nuisance Considerations

A nuisance can occur when one's rights in one's land and one's enjoyment and use thereof are diminished by actions of others. There are both private and public recourses; the latter are usually criminal actions and the former civil. The operation of wastewater solids processing plants or disposal sites could be vulnerable to nuisance claims from nearby residents and land-owners. There are many precedents for successful nuisance actions involving odors, ground-water contamination, and even the unfounded fear of contagion from disease. Several common defenses can be raised against nuisance actions, including legislative approval of the activity.

## 3. Institutions and Administrative Agencies

Major Federal entities that would be directly concerned with the Wastewater Solids Study are the Environmental Protection Agency, Region IX, the Army Corps of Engineers, the Department of Agriculture, and the Food and Drug Administration.

State agencies that could have some regulatory function in connection with the Study are the State Water Resources Control Board, the Department of Health, the Department of Fish and Game, the Energy Resources Conservation and Development Commission, the Department of Food and Agriculture, the Solid Waste Management Board, the Air Resources Board, and the Department of Transportation, and the Department of Water Resources.

Regional agencies with regulatory functions in this field are the Bay Area Air Pollution Control District, the San Francisco Bay Conservation and Development Commission, the Metropolitan Transportation Commission, the Central Valley Regional Water Quality Control Board, the San Francisco Bay Regional Water Quality Control Board, and the California Coastal Commission.



The Association of Bay Area Governments is the areawide planning organization. Subregional agencies include wastewater treatment agencies, county solid waste management programs, and county health departments. Incorporated cities will also have a vested interest in the preparation and implementation of a Wastewater Solids Study.

#### 4. Jurisdictional Factors

The Wastewater Solids Study forms a framework for combining and interrelating the wastewater management, planning, and regulatory agencies within the study area. The four major agencies participating in the study under a Joint Exercise of Powers agreement are the City and County of San Francisco, the City of San Jose, the Central Contra Costa Sanitary District, and the East Bay Municipal Utility District. Other agencies participating in this agreement include the California Regional Water Quality Control Board, San Francisco Bay Region, the State Water Resources Control Board, and the U.S. Environmental Protection Agency.

The Policy Board, composed of representatives of the above agencies, directs and controls the Study, which will develop a regional wastewater solids management policy in the context of overall regional environmental management planning. The Association of Bay Area Governments (ABAG) is responsible for preparing an Environmental Management Plan for the region, of which the Wastewater Solids Study will provide the wastewater solids management component.

The Wastewater Solids Study Governmental Advisory Group provides coordination with Federal, State, regional, and local agencies concerned with, or with jurisdiction over, the processing and disposal of wastewater solids and not otherwise represented on the Policy Board.

Wastewater solids management is conducted on the subregional level by the wastewater treatment agencies, which are responsible for the treatment and disposal of wastewater solids in the area under their jurisdiction.

#### 5. Planning Requirements

The Wastewater Solids Study will provide a major component of the solid waste portion of the Environmental Management Plan being prepared by ABAG. When the facilities plans for sludge treatment and disposal are completed, they will be integrated into the existing 201 facilities planning. The county, local agency, and city planning requirements, as described in general plans, building and zoning codes, etc., are reviewed for compliance by the wastewater facilities plan.

### C. CONCERNED GROUPS AND ORGANIZATIONS

This report contains the first attempt to identify individuals, groups, agencies, and organizations, who may have an interest in the Wastewater Solids Study. This list is continuously being refined as more contacts are made in each of the nine subregions of the study area. The membership of each of the nine counties' solid waste management and/or advisory committees is included on the assumption that most of these people would have some concern in the planning and treatment of wastewater solids. Other names have been identified by various city, county, and special district officials in interviews with EIP and the Wastewater Solids Study staff.

### D. PUBLIC CONCERNS ABOUT TREATMENT OF WASTEWATER SOLIDS

This section contains a progress report of EIP's efforts to identify local issues, assess public awareness and acceptance, and determine the political feasibility of preparing and implementing a wastewater solids management plan for the Bay Region.

To ascertain the likely response by the public to regional planning of the treatment and disposal of wastewater, members of the Wastewater Solids Study staff and EIP met with representatives of the subregional wastewater treatment agencies and county officials who were instrumental in the preparation of the county solid waste management plans.

The development of solid waste plans represented a major attempt at preparing a subregional plan involving a variety of vested interests: city governments, special districts, private industry, conservationists, environmentalists, recycle advocates, taxpayers' groups, etc. The experience of the participants in developing solid waste studies applies directly to the Wastewater Solids Study in terms of management, retrieval of planning information, coordination, and public participation. In addition, each county was required to address the treatment of wastewater solids, although at a cursory level.

The nine Bay Area counties have had mixed success in developing their solid waste management plans. The most comprehensive plans with the highest level of participation by committee members appeared to be in counties where considerable groundwork had been laid prior to the formation of the solid waste management committees. Early identification of issues, personal knowledge of the committee members, strong leadership in the formation of plans, workable size (less than ten cities), minimal revisions of the draft plans, and active interest in cooperation were major factors.

Long-range planning for treatment of wastewater solids at the special district level varies greatly. Some districts have spent considerable effort on preparing a long-range plan. Others have



concentrated primarily on day-to-day operations. Most districts have expressed interest in the Wastewater Solids Study and were quite willing to participate if study results could be a source of information and did not conflict with existing plans for treating wastewater solids.

EIP will continue to contact local interested individuals and organizations and assess public awareness and acceptance of the Study findings, identify issues, and analyze the political feasibility of the disposal options.





SECTION III  
ANALYSIS OF ENVIRONMENTAL REVIEW PROCESS  
FOR THE REGIONAL WASTEWATER SOLIDS STUDY

A. INTRODUCTION

An EIS is required by the U.S. Environmental Protection Agency (EPA) in compliance with the National Environmental Policy Act of 1969 (NEPA). The EIS is being prepared jointly by the San Francisco Bay Region Wastewater Solids Study (WSS) and EPA in accordance with a Memorandum of Understanding between EPA and the lead agency, East Bay Municipal Utility District (EBMUD). In meeting this requirement, a combined Project Report/EIR/EIS will be published and formally circulated.

B. APPLICABLE LAWS AND GUIDELINES

1. National Environmental Policy Act (NEPA)

a. United States Environmental Protection Agency (EPA). The EPA will be the Federal agency responsible for the Wastewater Solids Study's compliance with the National Environmental Policy Act (NEPA) (Reference 1). EPA's responsibility for NEPA review is derived under the Federal Water Pollution Control Act amendments of 1972 (Reference 2). In practical terms, EPA's responsibility means that the Project Report/EIR/EIS on the Wastewater Solids Study will have to comply in all respects with EPA's regulations for the preparation of environmental impact statements (Reference 3).

b. Other Federal Agencies. Such agencies as the Army Corps of Engineers, the Fish and Wildlife Service, or the Soil Conservation Service may prove to have legal jurisdiction over aspects of the project. If these or other Federal agencies are required to issue a permit or take other action pursuant to the Wastewater Solids Study, their actions must be preceded by NEPA compliance. Therefore, the environmental concerns of all permitting Federal agencies should be addressed in the Draft Project Report/EIR/EIS to the extent possible.

c. State Water Resources Control Board (SWRCB). The State Water Resources Control Board is responsible for disbursing Federal funds in California under the Federal Water Pollution Control Act (PL 92-500; Reference 4). The EPA has entered into a number of agreements with the SWRCB regarding environmental review under the Act for California projects, including the Wastewater Solids Study. The comments of this agency on Project Report/EIR/EIS review for this project should, therefore, be given careful attention.

d. A-95 Review. The EPA's Impact Statement Guidelines require that applicants applying for grants administered by the EPA must assure compliance with the requirements of Office of Management and Budget Circular A-95 (Reference 5). The Association of Bay Area Governments (ABAG) is the designated regional clearing house for A-95 review in this area. The Draft and Final Project Report/EIR/EIS must therefore be submitted to ABAG in accordance with clearing house procedures. An agreement between the East Bay Municipal Utility District (EBMUD) as the lead agency and ABAG was executed in June 1976, as required by the A-95 process.

## 2. California Environmental Quality Act (CEQA)

a. General. The California Environmental Quality Act is the State law requiring the preparation of environmental impact reports on projects that may have a significant effect on the environment (Reference 6). The requirements for EIRs under this act are similar enough to the requirements for EISs under NEPA for a single report to be prepared that complies adequately with both laws. According to Section 21083.5 of the Public Resources Code (CEQA), it is not even mandatory that such a report be called an environmental impact report. State law requires, however, that an EIS submitted in lieu of a State report must meet or exceed the standards for content of an EIR (Reference 7) set forth in the State EIR Guidelines (Reference 8).

b. Lead Agency Responsibility. A number of State and local agencies have legal responsibilities with respect to the Wastewater Solids Study. These include the State Water Resources Control Board and all of the signatories to the Joint Powers Agreement establishing the Wastewater Solids Study. In accordance with the provisions of CEQA, the East Bay Municipal Utility District has been chosen as lead agency (Reference 9). As lead agency, the District's responsibilities vis-a-vis environmental review are different from those of the other agencies with jurisdiction, which are called "responsible" agencies. Specifically, in accordance with Section 21002.1(D) of the Public Resources Code, EBMUD is responsible for considering the "environmental effects, both individual and collective, of all activities involved in the proposed project." The responsible agencies must consider only the effects of "activities involved in the project that they are required by law to carry out or approve."

c. State Clearinghouse. Upon publication of the Draft Project EIR/EIS, the lead agency must submit the requisite number of copies to the State Clearinghouse, which is part of the Resources Agency. This office will be responsible for coordinating the review of the Project Report/EIR/EIS by all State agencies (Reference 10).



### 3. Substantive Differences Between NEPA and CEQA Reports

The official environmental review document for this project is to be a combined Project Report/EIR/EIS that must fulfill the specific requirements of all the appropriate guidelines under both NEPA and CEQA. The following differences between NEPA and CEQA requirements should be kept in mind during the preparation of this Project Report/EIR/EIS. The EPA guidelines are, generally speaking, more specific regarding the content of the document. This is particularly true in the socioeconomic and "secondary impacts" area of the project: NEPA provisions speak of the "human environment," while CEQA defines environment as the "physical conditions existing within the area affected . . ." (Reference 11). CEQA requires that EIRs contain specific discussions of mitigation measures, growth-inducing impacts, and measures for conserving energy and water. These requirements are not set forth as a part of the EPA guidelines under NEPA, but must still be covered in any EIR intended for CEQA compliance.

Because of several court decisions restricting the adoption of applicant-prepared environmental documents as EISs by Federal agencies, it will be important that EPA conduct an "independent review" of the pre-draft document and participate to the greatest extent possible in working sessions reviewing first drafts of segments of the document.

The public participation requirements of NEPA and CEQA also differ. NEPA (EPA) requires more formal public participation and public hearings on a Draft EIS than does CEQA. Neither the State Resources Agency Guidelines (Reference 9) nor the EBMUD EIR Guidelines (Reference 12) requires public hearings on a Draft EIR, although the SWRCB does. Its regulations (Reference 17) allow the EIR hearing to be combined with the hearing on the facilities plans, in which case the EPA regulations for facilities plan hearings would apply (Reference 16).

## C. ENVIRONMENTAL ASSESSMENT

### 1. Introduction

EIP's scope of services calls for the preparation of an environmental assessment of the Regional Plan (Task 5) and a Draft and Final EIR/EIS (Task 7) on the project report. A close review of the objectives and methods in the scope of services and of the tasks described in the Wastewater Solids Study work plan indicates that the environmental assessment of the Regional Plan (Task 5) would not be a legally-required review document. This is not to say that the environmental assessment should not be prepared in careful compliance with the NEPA and CEQA guidelines produced by EPA, the State SWRCB, and EBMUD, respectively. The content of the document should comply in every respect with the requirements of these guidelines. Since it is not intended that its review and circulation process be conducted in formal compliance with these guidelines, however, it is recommended that the document be titled an environmental assessment rather than an EIR/EIS. Figure 1 is a flow diagram of the process for reviewing the Regional Plan.

## 2. Agency Coordination

Because a number of Federal and State agencies will have legal jurisdiction over aspects of the project or land areas within the study boundaries, informal agency coordination should be established at the earliest possible opportunity. EIP and the Study Staff should maintain close informal contact with representatives of all the agencies involved as issues and problems unfold throughout the project's development. Efforts of this nature will not only increase the likelihood of final acceptability of the project's recommendations, but also increase the probability of smooth environmental review.

## 3. Preparation of the Draft and Final Project Report/EIR/EIS

The Environmental Assessment (Task 5) of the Regional Plan will be an essential base document for preparing the official Project Report/EIR/EIS, in accordance with the proposed outline as adopted. The following steps are expected to be followed for the formal Project Report/EIR/EIS review:

a. The Environmental Assessment of the Regional Plan draft will be revised to reflect any changes made in the Plan during its review and circulation.

b. Using the environmental assessment of the Regional Plan as a base document, an EIR/EIS will be prepared on the specific facility plans for each of the four Joint Powers' signatories. To reduce duplication, environmental information for the Regional Plan and the specific facility plan will be incorporated into this report as a single document.

c. The entire Project Report/EIR/EIS will be published and formally circulated as required under EIR and EIS guidelines. Figure 2 is a flow diagram of the circulation and review process.

d. Formal public hearings will be held on the Project Report/EIR/EIS in accordance with State Water Resources Control Board requirements. It is important to note that the EPA, as the Federal agency responsible for NEPA review, should be a co-sponsor of the public hearings. As lead agency, EBMUD should be a co-sponsor, since the SWRCB also requires this agency to hold public hearings (Reference 16). The EBMUD representative to this public hearing may be any duly authorized person, not necessarily an elected official.

e. After the formal review periods required under the appropriate guidelines, and after the public hearings, the final Project Report/EIR/EIS will be prepared. All comments on the environmental portions of the Project Report must be responded to the sponsoring agencies and Study Staff. The compilation of comments and responses could be printed as a separate addendum to the Project Report/EIR/EIS or added to it as a final chapter.



The Project Report/EIR/EIS will be a summary document designed to present readable, understandable information, since part of the anticipated audience is the general lay public (Reference 15). Care should be taken to keep this combined report as concise and readable as possible. Extensive use of task reports as appendices incorporated by reference should be considered. A special index to identify where traditional EIR/EIS elements can be found in the document will be provided as part of the combined Project Report/EIR/EIS.

REFERENCES  
SECTION III

1. National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq., PL 91-190. Section 102, related to EISs, is 42 U.S.C. § 4332.
2. Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq.; PL 92-500.
3. EPA Regulations on the Preparation of Environmental Impact Statements, 40 CFR 6, 40 FR 16814, April 14, 1975; as amended by 41 FR 20655, May 20, 1976.
4. Allotments to the states are made under the authority of § 205 of the Federal Water Pollution Control Act (see Reference 2).
5. Section 1500.9(c) of EPA Regulations for Preparation of Environmental Impact Statements, 40 CFR 6.
6. California Environmental Quality Act of 1970, Division 13, Public Resources Code, Section 2100 et. seq.
7. Public Resources Code, § 21083.5, see also California EIR Monitor, February 22, 1977.
8. Guidelines for the Preparation of EIRs, Title 14, California Administrative Code, Section 15000 et. seq.
9. In accordance with Public Resources Code, § 15064 of California Administrative Code.
10. California Administrative Code, § 15085(d) (4).
11. See Council on Environmental Quality Guidelines (NEPA) § 1500.1 (40 CDR 1500.1) and California Public Resources Code § 21065.5
12. East Bay Municipal Utility District, Implementation of the Environmental Objectives, Criteria and Procedures, No. GM-042, April 4, 1973.
13. Jokela, Arthur, Self-Regulation of Environmental Quality Impact Analysis in California Land Government, EPA/600/3-76/76-040, Center for Public Affairs, Claremont, CA, April 1976.
14. EBMUD is required to amend its guidelines to reflect recent changes in CEQA. The amended guidelines should be checked for public hearing requirements when available.
15. Public Resource Code, § 21061.



16. Grants for Clean Water, Environmental Impact Report and Public Participation Guidelines for Wastewater Agencies, State Water Resources Control Board, 1976.





## SECTION IV EXISTING INSTITUTIONAL FACTORS

### A. INTRODUCTION

This section reviews legislation pertinent to the Wastewater Solids Study on the Federal, State, and local levels; examines relevant common law nuisance considerations; identifies various institutions and administrative agencies that could potentially be involved in the preparation and implementation of the study; discusses the interrelationship of wastewater planning and regulatory agencies in the region; and reviews major planning requirements set forth in regional plans.

Federal and State laws have been enacted establishing the requirements for adequate planning, implementation, management, and enforcement, including penalties for noncompliance for the control of water quality. In addition, Federal regulations and State regulations and plans have been developed to augment and clarify the laws and to provide detail not included in the law.

The effectiveness of water pollution control programs in California has been attributed in part to a legislative and regulatory system that is responsive to regional needs and innovative and demanding in regulation and enforcement. In addition, increasing awareness of environmental problems by the general public and environmental groups over the past decade has resulted in landmark legislation at the Federal, State, and local levels. The most important for purposes of this study are included below.

### B. FEDERAL LAWS

#### 1. Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500)

The Federal Water Pollution Control Act Amendments were passed in October 1972. The Act called for basin plans for water quality control, set up a system of permits for all wastewater discharges, authorized grant funds for sewerage facility construction, and, in Section 208, required area-wide waste treatment management plans for major urban/industrial complexes. Under Section 201, the Act specified the minimum levels of treatment required regardless of where wastewaters are discharged. It authorized some of the funding and defined the necessary planning for pollution control facilities. Major treatment facilities in the San Francisco Bay Area are being replaced or upgraded to comply with PL 92-500.

The objective of the 1972 Amendments is to restore and preserve the chemical, physical, and biological integrity of the nation's waters. Goals set forth to achieve this are:

- to eliminate the discharge of pollutants to navigable waters by 1985;
- to provide water quality that protects and fosters propagation of fish, shellfish, and wildlife and allows recreation in and on the water by 1983;
- to eliminate discharge of toxic substances in toxic amounts
- to provide financial assistance to construct publicly-owned treatment systems;
- to develop and implement area-wide waste treatment management plans; and
- to develop technology necessary to carry out these goals.

The responsibility for administering the Act is placed with the Administrator of the U.S. Environmental Protection Agency (EPA).

## 2. National Environmental Policy Act of 1969 (NEPA) (Public Law 91-190)

NEPA encourages all levels of government and concerned public and private organizations to create and maintain conditions under which man and nature can exist in productive harmony and fulfill the social, economic, and other desires of present and future generations. The Act directs an interdisciplinary approach to insure integrated use of all talents in planning and making decisions involving impact on the environment (Section 102). Every report or recommendation must be accompanied by a detailed statement by the responsible official on the environmental impact of the proposed action, any adverse environmental effects that cannot be avoided if the action is taken, alternatives to the proposed action, relationship between local short-term uses of the environment and maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources if the proposed action is taken. Appropriate alternatives to proposed actions must be studied and developed when conflicts with the use of available resources are encountered. It requires an Environmental Impact Statement (EIS) to accompany any request for Federal action (including financial support) that may have a significant effect on the environment.

## 3. Federal Clean Air Act of 1970 (Public Law 91-604)

The goal of PL 91-604 is to protect public health from air pollution resulting from the population growth in metropolitan areas. Plans prepared under the Act may include land use and transportation controls. The Act requires the preparation of State implementation plans describing how air quality standards are to be



achieved and maintained. A timetable and a process for establishing these air quality standards are to be included.

The California Air Resources Board, assisted by the Air Pollution Control Districts in each air quality basin, has prepared the State Implementation Plan for California. For regions designated as critical air basins, such as the Bay Area, additional plans were required. The transportation control plan, which becomes a revision of the State Implementation Plan, identified short-term control measures for achieving air quality standards, including restrictions on the use of the automobile. Few of these transportation-related measures have been implemented. The Air Quality Maintenance Plan element of ABAG's Environmental Management Plan will include long-term control strategies for attaining and maintaining air quality standards as related to water pollution control. When adopted by the California Air Resources Board and approved by EPA, the Air Quality Maintenance Plan will constitute a revision of the State Implementation Plan and will guide future air quality decisions in the Bay Area.

4. Marine Protection, Research and Sanctuaries Act of 1972  
(Public Law 92-532)

This Act is commonly known as the "Ocean Dumping Act." All sea disposal of wastes in the United States, including sewage sludge, is regulated by the Environmental Protection Agency. The Act provides for control of both material transportation for dumping and actual dumping operations. A proposed revision of the regulations and criteria was published in the June 28, 1976, Federal Register. The Act essentially prohibits ocean disposal of wastewater solids.

The Secretary of Commerce is authorized to designate as marine sanctuaries areas that should be preserved or restored for their conservation, recreation, ecological, or aesthetic values. These may be situated in ocean waters as far as the outer edge of the continental shelf as well as in other coastal waters. Once an area is designated as a marine sanctuary, no permits, licenses, or other authorizations can be issued unless the Secretary determines that the permitted activity is consistent with the purposes of the established sanctuary.

5. Resource Conservation and Recovery Act of 1976  
(Public Law 94-580)

This Act is built on the foundation of the Solid Waste Disposal Act of 1965 and the Resource Recovery Act of 1970. The Congress intended RCRA to address the following problems:

- The ever-increasing amounts of waste materials being generated as a result of national economic and population growth.

- Serious financial, management, intergovernmental, and technical problems in solid waste collection, treatment, and disposal in urban areas resulting from population concentration.
- Open dumping of solid waste, which needlessly pollutes valuable land resources as well as air and water resources.
- Human health and environmental dangers resulting from improper disposal of solid waste and especially hazardous waste.
- Increasing amounts of pollution-control residuals (wastewater solids, etc.) destined for land disposal as a result of the Clean Air Act, the Water Pollution Control Act, and other Federal and State laws.
- The wasteful burial of recoverable resources with attendant increases in dependence on foreign energy and material sources, and in balance-of-payment deficits.
- The need to continue the development of solid waste as an energy source to conserve and reduce dependence on such resources as petroleum, natural gas, nuclear energy, and hydroelectric generation.

The stated objectives of RCRA are to promote the protection of health and the environment and to conserve valuable material and energy resources. The Act statutorily establishes the Office of Solid Waste within EPA to guide the implementation of the law and establishes a Federal/State/local partnership to share the implementation.

The law defined solid waste to include wastewater solids and requires that the State Solid Waste Plans require that all non-hazardous solid waste be disposed of in sanitary landfills, be utilized for resource recovery, or be otherwise disposed of in an environmentally sound manner. EPA has 18 months from passage date (October 21, 1976) to develop criteria to identify hazardous wastes and to publish a list of hazardous wastes as defined in Section 1004 of the Act.

Should the EPA determine that wastewater solids belong on that list, the range of options for wastewater solids management would be severely constrained and the regulating and reporting requirements increased in accordance with Subtitle C of the Act ("Hazardous Waste Management").

#### 6. Federal Noise Control Act of 1972 (Public Law 92-574)

This is companion legislation to the water- and air-related acts treating the problems of noise emissions. The law establishes standards and enforcement provisions and places primary



responsibility for noise control on state and local governments. The impact of this Act on the water quality control plan relates to environmental considerations in locating wastewater treatment facilities, which include noise levels and their effect on the local environment.

### C. STATE LAWS

#### 1. California Environmental Quality Act of 1970 (CEQA)

CEQA is contained in the California Resources Code and requires the consideration of environmental factors in all actions by governmental agencies. It specifically requires all State agencies, boards, and commissions to prepare an Environmental Impact Report (EIR) on any project that may have a significant effect on the environment. Requirements for preparation of the EIR and EIS for the Wastewater Solids Study will be coordinated with the State Water Resources Control Board and the U.S. Environmental Protection Agency to minimize duplication of work. Any regional wastewater solids management planning will be done in the context of these existing laws and within a framework of continuing planning in related subject areas. (See Section III for a more detailed description of the relationship between CEQA, NEPA, and the Wastewater Solids Study.)

#### 2. Porter-Cologne Water Quality Control Act (Div. 7 of the Water Code)

This Act established the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards. The SWRCB formulates and adopts State policies for water quality control. These policies consist of water quality principles and guidelines for long-range planning for management of State waters. Regional boards formulate, adopt, and enforce water quality control plans, approved by the SWRCB, for their regions. The SWRCB may adopt water quality control plans applicable to waters for which water quality standards are required by Federal laws. Through this review and approval procedure, the plan becomes the official Federal and State water quality control plan.

#### 3. Solid Waste Management and Resource Recovery Act of 1972 (SB 5)

The Nejedly-Z'Berg-Dills Act was passed by the California Legislature in 1972. It created the State Solid Waste Management Board, which is responsible for developing solid waste management policy. State policy outlines the minimum standards for solid waste management plans, and the primary responsibility for solid waste management rests with the county governments. These county-wide plans must contain the necessary intergovernmental and

public/private arrangements for administration, financing, enforcement, operations, and continuing planning. The county-wide plans do not at present address regional solid waste issues.

ABAG's Environmental Management Plan will provide for coordination among the county plans and will address solid waste management issues that county plans identify as requiring a regional approach; for example, the evaluation of alternative large-scale resource recovery systems, the availability of Class I sites for disposing of toxic wastes, and the management of wastewater solids. Related state and regional studies, such as the Bay Area Waste Management Project, the Class I Site Study being conducted by the State Solid Waste Management Board, and the Regional Municipal Wastewater Solids Management Study, will be incorporated as applicable.

4. Coastal Zone Conservation Act of 1972 (Division 18 of the Public Resources Code)

This law created a State Coastal Zone Commission and six regional commissions to prepare a Coastal Zone Conservation Plan by December 1, 1975. A State Coastal Plan was adopted by the Legislature in 1976 in response to the Act. Any development in the coastal zone must receive a permit before construction is begun. Any development that would adversely affect water quality requires a vote of the regional commission to gain approval. The Coastal Plan also contains a land use element.

5. Maximum Property Tax Rates for Units of Local Government, SB 90 of 1972 (Revenue and Taxation Code, Chapter 15)

This law establishes limits on property tax rates in an effort to provide property tax relief. The law provides that the maximum property tax rate shall be levied by the local government for the 1972-73 fiscal year. This applies to counties, cities, and special districts. The law allows certain increases according to a restrictive formula and a rate change by a majority vote in an election called for that purpose. A problem is created by Section 2163, which provides that the State will pay to each type of local government, including special districts, an amount to reimburse local governments for the full costs of any new State-mandated program or any increased level of service of an existing mandated program. Further, if a local government has been providing a service or program at its option that is subsequently mandated by the State, the State shall pay such local government for such mandated service or program, and the local government shall reduce its property tax revenues expended on such service or program.



6. Joint Exercise of Powers Act (Adopted in 1921, Sections 6500 et seq. Government Code, and Modified Substantially from Time to Time)

Under this Act the governing bodies of participating public agencies may contract to provide for performance of governmental functions by other public agencies or by cooperative joint operations of the contracting parties by the following means:

a. By delegating necessary authority to a "sister" agency to perform and exercise certain governmental responsibilities and powers on its behalf;

b. By agreement creating a new agency with delegated powers, not exceeding powers possessed by the participating public agencies, and responsibilities for performance of assigned responsibilities and functions for the benefit of the participating agencies; or

c. By agreement providing for procurement of services and/or joint utilization of manpower, financial, and physical resources and legislative-administrative-financial powers of the participating agencies in furtherance of common objectives.

The last alternative may be considered as a formal agreement providing for creation of an informal new operating institutional entity with only nominal delegated powers.

7. District Reorganization Act of 1965

By petition signed by not less than five percent of the qualified electors or by owners of not less than five percent of the assessed valuation of land, proceedings for consolidating existing local waste treatment agencies into a single subarea may be initiated. As an alternative, such proceedings may also be initiated by application of some of the governing bodies of existing waste treatment agencies within the boundaries of the proposed subarea agency. After extensive hearings and processing before the Local Agency Formation Commission and the County Board of Supervisors, the proposed reorganization plan cannot become effective until approved by a majority vote of the qualified electors.

8. Special District Formation Acts

The State Legislature may adopt special legislation to permit creation of a waste treatment district agency within any of the proposed subareas. Such action may be warranted if existing procedures are inadequate to meet requirements of the 1972 Federal Act or if such proceedings would be unduly complicated because of the large number of diverse agencies having varying powers or limited authority that may be involved.

## 9. County Sanitation District Act

Under authority of Sections 4700 et seq. of the Health and Safety Code, a County Board of Supervisors may form a county sanitation district. Proceedings may be initiated by resolution of intention of the Board of Supervisors. The Local Agency Formation Commission is required to hold public hearings prior to its approval of the proposal and notice and hearing before the Board of Supervisors also is required. A petition signed by owners of more than half the assessed valuation of property within the proposed district may halt district formation proceedings. A petition signed by two percent of the district's registered voters would require approval by a majority vote of the district's qualified electors for continuation of district formation proceedings. If qualifying protests are not filed, the Board of Supervisors may order district formation at the close of its hearing.

## 10. Sanitary District Act of 1923

Under Section 64000 et seq. of the Health and Safety Code, a Sanitary District may be formed under procedures generally similar to those applicable to the formation of a County Sanitation District. The principal differences between the two district forms is that the governing body of the Sanitary District would be elective rather than holding office by virtue of being a director of a participating waste treatment agency. In addition, the tax base would include personal as well as real property; however, a debt limitation of 15 percent of assessed valuation for general obligation bonds and 1 percent on taxes for operation and maintenance costs would apply, although with regard to the County Sanitary District there are no statutory limits.

## D. LOCAL LEGISLATION

Each of the nine counties and the cities within the counties have ordinances affecting wastewater solids in a number of ways. Of relevance is whether they currently prohibit importation of liquid or solid wastes from other areas:

- Marin County prohibits importation of liquid and solid wastes although the county itself is an exporter.
- Sonoma County prohibits importation of liquid and solid wastes without approval of the Board of Supervisors.
- Napa County currently has no city or county ordinance regarding waste importation; however, Napa County regards its landfills as resources, and the supervisors would no doubt act with haste to enact prohibitions if the threat were to arise.



- Solano County discourages importation of liquid and solid waste, but at this time has no prohibition.
- San Mateo County limits importation of liquid or solid wastes from other areas.
- Santa Clara County administrative policy excludes the importation of sludge from other counties.
- Alameda County does not limit importation of sludge from other counties.
- Contra Costa County allows some material to be brought in from outside the county.
- San Francisco does not limit the importation of liquid or solid waste from other areas.

#### E. COMMON LAW NUISANCE

The law recognizes two kinds of nuisances, private and public (Reference 4). A public nuisance is an act or omission that disrupts or causes inconvenience or damage to the public in their exercise of common rights. Public nuisances are usually abated by criminal penalties and procedures, although if municipal corporations are involved, they may be fined because they are not subject to criminal law.

Private nuisances are civil wrongs based on a disturbance of rights in the use and enjoyment of land and include interference with one's reasonable comfort and convenience in occupying his land.

Plaintiffs filing suit for nuisance abatement and/or for compensation for damages suffered during the disturbance of their rights to use and enjoy their land must prove that there has been an unreasonable and substantial interference with the interests involved, either to the land itself or to their rights to the use and enjoyment of their land (Reference 4). In the latter case, the damages must be such that there would have been a definite offensiveness, inconvenience, or annoyance to a normal person in the community. Many cases found the existence of a private nuisance based on fact situations that could arise during the processing and disposal of wastewater solids. These would include the pollution of ground water (Reference 5), the escape of unpleasant odors (Reference 6), and even a line of cases that found that tuberculosis sanatoria were public nuisances because of the fears of contagion of the diseases in the neighborhoods (Reference 7).

In deciding nuisance actions, the courts must balance between the gravity of the harm to the plaintiff and the utility of the defendant's conduct. The interest of the community as a whole in the defendant's activity is important and is weighed against the ease of abating the nuisance. In one case it was found that a sewage system essential to a city's existence could not be enjoined or heavily burdened even though there was a clear inconvenience to adjoining landowners (Reference 8).

Another factor to be considered is the appropriateness of the activity to the parcel of land on which it is situated. Zoning ordinances play a major role in determining appropriate uses in such instances. Permission of a legislative body (including local elected bodies) to undertake the activity can be a defense to minor interferences in the use of adjoining lands (Reference 4). This defense would probably be usable in most instances of wastewater, solids processing and disposal because local legislative bodies would have been involved in selection and approval of the site and/or processing methods. There is a constitutional limitation on this defense, however. If the plaintiff could show that there was a major interference in the use of his land, there would be a "taking" under the Fifth Amendment of the Constitution, and compensation would be awarded.

#### F. INSTITUTIONS AND ADMINISTRATIVE AGENCIES

The Wastewater Solids Management program is subject to regulation by a myriad of Federal, State, and local agencies whose functions range from treatment and disposal of wastewater solids to planning and grant approval or regulation and review of operations. The major concern in terms of regulation is to protect environmental quality in accordance with the Federal Water Pollution Control Amendments of 1972 and to preserve air quality. The agencies are listed according to a hierarchy: Federal agencies set standards and funding criteria, State agencies set standards on a state level in conformance with Federal guidelines, and local agencies enforce site-specific provisions.

##### 1. Federal Agencies

a. U.S. Environmental Protection Agency, Region IX. EPA is an independent regulatory agency responsible for controlling air and water pollution, drinking water quality, solid wastes, pesticides, environmental radiation, and noise. The agency conducts research and demonstrations, establishes and enforces standards, monitors pollution, and assists state and local governments in environmental regulation.

EPA administers the Federal Water Pollution Control Act Amendments of 1972 and provides uniform national policy for effluent quality, receiving water standards, treatment levels, industrial



pretreatment requirements, and the National Pollution Discharge Elimination System (NPDES) program. This agency monitors and reviews the NPDES program implemented by the State of California.

Policy related to wastewater solids management is contained in the proposed Technical Bulletin titled "Municipal Sludge Management: Environmental Factors" (Reference 9). These guidelines will be used by EPA regional administrators to evaluate wastewater solids management projects and to provide information for project evaluation, general requirements for sludge utilization methods, including land application of sludges, and environmentally-acceptable methods for sludge disposal. EPA administers the Ocean Dumping Act, which essentially eliminates ocean disposal of sludge.

b. Department of the Army, Corps of Engineers. The Corps enforces the Rivers and Harbors Act of 1899 and the Federal Water Pollution Control Act in navigable waters. Permits are issued for dredging, construction, or fill in or near such waters.

c. Other. Several Federal agencies have jurisdiction over the disposition of wastewater solids, due either to their jurisdiction over a location or to their regulation of particular types of substances. The Department of the Interior, National Park Service, is responsible for the collection and disposal of solid wastes in Point Reyes National Seashore and Muir Woods National Monument. The Department of Agriculture and the U.S. Food and Drug Administration are concerned with wastewater solids as they relate to agricultural use and the production of foodstuffs.

## 2. State and Regional Agencies

a. State Water Resources Control Board. This agency has prepared comprehensive water quality control plans for the 16 major hydrographic basins in California to determine the best method of controlling the quality of California's waters. These plans meet Federal requirements for grant funds enabling construction of wastewater treatment facilities, fulfill the requirements of the Porter-Cologne Water Quality Control Act, and provide a basis for developing facilities plans, which are required for disbursement of State construction grant funds. They also provide a basis for evaluating the water quality control plans of other agencies.

The State Board, in conjunction with the Regional Water Quality Control Board, San Francisco Bay Region, has prepared a Basin Plan (Reference 10), which provides a basis for the granting of Federal and State funds for construction of sewerage facilities and fulfills the requirements of Section 303(e) of the Federal Water Pollution Control Act Amendments of 1972. The Plan is intended to provide guidance for solving long-range water quality problems.

The Plan addresses water quality management in the nine-county area and evaluates three alternative methods of wastewater solids disposal: anaerobic digestion with land application, landfill disposal, and incineration with ash disposal to landfill. A specific basin-wide wastewater solids management program is not recommended as part of the Basin Plan, but general guidelines for future planning are expressed. The co-incineration of sewage sludge and solid waste is under serious consideration.

Upon the determination of the need for regional coordination of wastewater solids management planning, the SWRCB requested that the four major wastewater treatment agencies combine to conduct a regional study. A Joint Exercise of Powers Agreement was developed, with EBMUD designated as the lead agency for the purpose of administering the Step 1 facilities planning grant, and the Wastewater Solids Study for the San Francisco Bay Region was initiated in February 1976. Subregional and local agencies participate through an advisory committee composed of representatives from the eight subregions.

The Regional Water Quality Control Board regards wastewater solids disposal sites as containing waste discharges affecting water quality and sets site operational requirements such as drainage, distance to ground water, and acceptable waste.

b. California Department of Health, Division of Health Protection, Vector and Waste Management. This agency develops minimum standards for waste handling and disposal for the protection of the public health. It prohibits the creation of contamination, pollution, or a nuisance by the use or disposal of sewage sludge. The Department drafted proposed regulations for the processing and disposal of wastewater solids in 1974, and is in the process of developing final regulations for the disposal and use of sludge.

c. State Solid Waste Management Board. The Board has formulated statewide policies for solid waste management as well as standards for storage, collection, and transfer station and disposal site operation. It has required each county, in cooperation with the cities, to prepare a master plan for solid waste management to be submitted to the State Board for approval by January 1976. Wastewater solids are considered a category of solid waste and are therefore subject to the jurisdiction of this agency if disposed of in a sanitary landfill. Their disposal must meet the State's minimum standards for solid waste collection, processing, transfer, and disposal.

d. California Air Resources Board. The ARB sets statewide policy for control or prevention of air pollution from burning of solid waste materials, and is developing a State Implementation Plan for achieving air quality standards. The San Francisco Bay



Area has been identified as an Air Quality Maintenance Area, with the potential for long-term air pollution problems. EPA regulations require the development of an Air Quality Maintenance Plan for each area so designated, to include land use and transportation control measures and programs for enforcement. Water quality and solid waste programs should be consistent with plans to achieve clean air.

e. Bay Area Air Pollution Control District. Created by the California Legislature in 1955, this agency has jurisdiction over all stationary sources of air pollution and regulates emissions from rail and sea transportation. Regulations have been enacted to reduce air contaminants from various sources, either directly by placing emission limits on contaminants, or indirectly by curtailing burning or through process changes adopted by industries to meet limits. The agency has broad power to abate emission of air contaminants that cause injury or damage to business or property. It sets air pollution emission standards and issues permits to solid waste facilities for discharges to an air basin. These affect the design of incinerators, pyrolysis units, and solar evaporation ponds for liquid wastes.

f. Association of Bay Area Governments (ABAG). Formed by a joint powers agreement among the city and county governments in the Bay Area in 1961, ABAG is an areawide planning organization charged with the responsibility for regional planning and review for Federal grant applications through the A-95 review process. ABAG is responsible for preparing an Environmental Management Plan for the Bay Area under funds authorized by Section 208 of the Water Pollution Control Act Amendments of 1972. This plan will be prepared in cooperation with local, regional, State, and Federal agencies and will include management plans for surface runoff, air quality maintenance, municipal wastewater facilities, nonpoint sources of wastewater, industrial discharges, water conservation, reuse, and supply, and solid waste. The Wastewater Solids Management Program is a subelement of the Environmental Management Program and will develop a regional residual management plan to complement the 208 planning process.

g. The San Francisco Bay Conservation and Development Commission. Established in 1965 by the McAteer-Petris Act, BCDC regulates all filling and dredging in San Francisco Bay (including San Pablo and Suisun Bays) in accordance with the law and the Commission's Bay Plan. The Commission has limited jurisdiction over substantial developments within a 100-foot strip inland from the Bay and over any proposed filling of salt ponds or managed wetlands. The regulation for issuance of permits for land use near the Bay shoreline affects existing and proposed landfill sites.

h. California Department of Transportation, District IV. As the State agency responsible for the planning and engineering of freeways and State highways in the San Francisco Bay Area, CALTRANS provides basic data and technical input to air pollution control and regional transportation planning agencies.

i. San Francisco Bay Area Metropolitan Transportation Commission. Created by the State Legislature in 1970, this agency has prepared a Regional Transportation Plan for the nine-county San Francisco Bay Area. MTC will also propose transportation-control measures to reduce emissions of air pollutants. The measures deal indirectly with sludge in terms of the transportation of wastewater solid material.

j. Other. The State Energy Resources Conservation and Development Commission is concerned with the energy requirements of the wastewater solids processing and disposal options and possibly with methane reclamation as a by-product of processing.

The State Department of Fish and Game has jurisdiction over substances that are deleterious to fish and aquatic life. The State Department of Food and Agriculture is concerned with agricultural application of wastewater solids.

### 3. Subregional Agencies

Programs for the treatment, processing, disposal, and regulation of wastewater solids are under the jurisdiction of numerous agencies, including 70 wastewater treatment agencies, special districts, county solid waste management agencies, and local agencies with authority to regulate the placement of sludge. This section is organized by type of jurisdiction and indicates the authority exercised by the agencies rather than listing each individual agency throughout the entire study area.

a. Wastewater Treatment and Sludge Processing. Cities and sanitary districts in the study area are responsible for processing wastewater and the disposal of wastewater solids (see Table 1). They may acquire, construct, and operate facilities for treatment or disposal of wastes. In the absence of any coordinated planning program, these agencies have managed the increasing wastewater solids loads by the most readily available methods. Wastewater treatment and solids facilities planning is at various stages throughout the study area, and it is assumed that the resulting wastewater solids treatment facilities will meet the immediate



TABLE 1

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## ALAMEDA COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>EAST BAY DISCHARGERS AUTHORITY (EBDA)</p> <p>San Leandro, City of</p> <p>Oro Loma Sanitary District</p> <p>Castro Valley Sanitary District</p> <p>Hayward, City of</p> <p>Union Sanitary District</p>	<p>EAST BAY MUNICIPAL UTILITY DISTRICT, SPECIAL DISTRICT NO. 1</p> <p>Stege Sanitary District (in Contra Costa County)</p> <p>SAN LEANDRO, CITY OF</p> <p>ORO LOMA SANITARY DISTRICT (Treatment plant owned jointly with Castro Valley S.D.)</p> <p>CASTRO VALLEY SANITARY DISTRICT</p> <p>HAYWARD, CITY OF</p> <p>UNION SANITARY DISTRICT</p>	<p>Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont</p> <p>El Cerrito, Kensington, Richmond (part of)</p> <p>San Leandro</p> <p>Hayward (part of), San Leandro (part of), San Lorenzo</p> <p>Castro Valley</p> <p>Hayward (part of)</p> <p>Fremont, Newark, Union City (served by 3 plants)</p>
<p>Source: Association of Bay Area Governments, "Map Showing Areas Serviced by Municipal and Private Sewerage Agencies, San Francisco Bay Region, 1976."</p>		

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

ALAMEDA COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY (LAVWMA)</p> <p>Valley Community Services District</p> <p>Pleasanton, City of</p> <p>Livermore, City of</p>	<p>VALLEY COMMUNITY SERVICES DISTRICT</p> <p>PLEASANTON, CITY OF</p> <p>LIVERMORE, CITY OF</p>	<p>Camp Parks, Com- modore Ski Village, Pleasanton (part of), Santa Rita Rehabili- tation Center</p> <p>Pleasanton (part of)</p> <p>Livermore</p>



TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## CONTRA COSTA COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>WEST COUNTY AGENCY (WCA)</p> <p>Richmond Municipal Sewer District No. 1</p> <p>San Pablo Sanitary District (Contra Costa County Sanitation District No. 3)</p> <p>Pinole, City of</p> <p>Hercules, Town of</p> <p>Rodeo Sanitary District</p> <p>Crockett-Valona Sanitary District</p> <p>Contra Costa, County of</p>	<p>Stege Sanitary District (tributary to East Bay Municipal Utility District, Special District No. 1 in Alameda County)</p> <p>RICHMOND MUNICIPAL SEWER DISTRICT NO. 1</p> <p>SAN PABLO SANITARY DISTRICT</p> <p>PINOLE, CITY OF</p> <p>HERCULES, TOWN OF</p> <p>RODEO SANITARY DISTRICT</p> <p>CROCKETT-VALONA SANITARY DISTRICT</p>	<p>San Pablo, Tara Hills, El Cerrito, Kensington, Richmond (part of)</p> <p>Richmond (part of)</p> <p>El Sobrante (part of), Pinole (part of), Richmond (part of)</p> <p>Pinole (city of), Hercules</p> <p>Hercules</p> <p>Oleum, Rodeo</p> <p>Crockett, Valona</p>

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

CONTRA COSTA COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
EAST-CENTRAL CONTRA COSTA WASTEWATER MANAGEMENT AGENCY  Port Costa Sanitary District (Contra Costa County Sanitary District No. 5)  Mountain View Sanitary District  Contra Costa County Sanita- tion District No. 7A	CENTRAL CONTRA COSTA SANITARY DISTRICT	Alamo, Clayton (part of), Concord (part of), Danville, Diablo, Lafayette, Martinez, Moraga, Orinda, Pacheco, Pleasant Hill, Rheem, Walnut Creek, San Ramon (part of)
	CONCORD, CITY OF	Clayton (part of), Concord (part of)
	VALLEY COMMUNITY SERVICE DISTRICT	Dublin, San Ramon (part of)
	PORT COSTA SANITARY DISTRICT	Port Costa
	MOUNTAIN VIEW SANITARY DISTRICT	
	CONTRA COSTA COUNTY SANITATION DISTRICT NOS. 7A and 7B  Contra Costa County Sanitation District No. 7A	Nichols, Shell Tract, Shore Acres



TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

CONTRA COSTA COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>Contra Costa County Sanitation District No. 7B</p> <p>Pittsburg, City of</p> <p>Antioch, City of</p> <p>Oakley Sanitary District</p> <p>Contra Costa County Sanitary District No. 15</p> <p>Brentwood, City of</p> <p>Contra Costa County Sanitation District No. 19</p> <p>Contra Costa, County of</p> <p>Contra Costa County Water District</p>	<p>Contra Costa County Sanitation District No. 7B</p> <p>PITTSBURG, CITY OF</p> <p>ANTIOCH, CITY OF</p> <p>OAKLEY SANITARY DISTRICT</p> <p>CONTRA COSTA COUNTY SANITATION DISTRICT NO. 15</p> <p>BRENTWOOD, CITY OF</p> <p>CONTRA COSTA COUNTY SANITATION DISTRICT NO. 19</p> <p>BYRON SANITATION DISTRICT</p>	<p>Pittsburg</p> <p>Antioch</p> <p>Oakley</p> <p>Bethel Island</p> <p>Bethel Island</p> <p>Discovery Bay</p> <p>Byron</p>

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## MARIN COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
SOUTHERN MARIN SUBREGIONAL SEWERAGE AGENCY (SMSSA)		
Sausalito-Marín City Sanitary District	SAUSALITO-MARIN CITY SANITARY DISTRICT	Sausalito, Marin City
Tamalpais Valley Community Services District	Tamalpais Valley Community Services District	Tam Valley, Tam Woods
Sanitation District No. 5	SANITATION DISTRICT NO. 5	Tiburon
Belvedere, City of	Belvedere, City of	Belvedere
Richardson Bay Sanitary District	RICHARDSON BAY SANITARY DISTRICT	Del Mar Estates, Hawthorne Terrace, Strawberry
Mill Valley, City of	MILL VALLEY, CITY OF	Mill Valley
Almonte Sanitary District	Almonte Sanitary District	Almonte
Alto Sanitary District	Alto Sanitary District	Alto
Homestead Valley Sanitary District	Homestead Valley Sanitary District	Homestead Valley
	Kay Park Sewer Maintenance District No. 2	Kay Park



TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

MARIN COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>EASTERN MARIN-SOUTHERN SONOMA joint powers agreement</p> <p>Southern Marin Subregional Sewerage Agency</p> <p>Sanitation District No. 1</p>	CALIFORNIA STATE PRISON, SAN QUENTIN	San Quentin Prison
	San Quentin Village Sewer Maintenance District	San Quentin Village
	SAN RAFAEL SANITATION DISTRICT	San Rafael (part of)
	NORTH MARIN COUNTY WATER DISTRICT	Oceana Marin
	NORTH MARIN COUNTY WATER DISTRICT	Tomales
	BOLINAS COMMUNITY PUBLIC UTILI- TIES DISTRICT	Bolinas
	STINSON BEACH COUNTY WATER DISTRICT	Stinson Beach
	SANITATION DISTRICT NO. 1	Fairfax, Greenbrae, Kentfield, Kent Woodlands, San An- selmo, Sleepy Hollow, Ross, Larkspur (part of)

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

MARIN COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
	Sanitary District No. 2	Corte Madera
	Larkspur Sanitation District	Larkspur (part of)
	Murray Park Sewer Maintenance District	Murray Park
Hamilton Air Force Reserve Base	HAMILTON AIR FORCE BASE	Hamilton Air Force Base
Las Gallinas Valley Sanitary District	LAS GALLINAS VALLEY SANITARY DISTRICT	San Rafael (part of), Lucas Valley, Marinwood, Northgate, Portola Gardens, San Rafael Meadows, Santa Venetia, Terra Linda
Novato Sanitary District (Sanitary District No. 6)	NOVATO SANITARY DISTRICT	Novato, Ignacio, Bahia (served by 3 plants)
Petaluma, City of	(See Eastern Marin-Southern Sonoma in Sonoma County)	joint powers agreement
Sonoma Valley County Sanitation District	" "	" "
Sonoma, County of	" "	" "



TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## NAPA COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
	AMERICAN CANYON COUNTY WATER DISTRICT  NAPA SANITATION DISTRICT  VETERANS HOME  YOUNTVILLE, CITY OF  ST. HELENA, CITY OF  CALISTOGA, CITY OF	American Canyon  Napa, County (part of)  Veterans Home  Yountville  St. Helena  Calistoga

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## SAN FRANCISCO COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
	<p data-bbox="907 443 1508 476">SAN FRANCISCO, CITY &amp; COUNTY OF</p> <p data-bbox="944 541 1417 574">Agricultural District 1A</p> <p data-bbox="944 607 1458 671">Bayshore Sanitary District (in San Mateo County)</p> <p data-bbox="944 704 1500 798">Guadalupe Valley Municipal Improvement District (in San Mateo County)</p>	<p data-bbox="1587 443 1997 506">San Francisco (Served by 4 plants)</p> <p data-bbox="1587 541 1790 567">Cow Palace</p> <p data-bbox="1587 601 1955 635">Daly City (part of)</p> <p data-bbox="1587 700 1922 763">Brisbane, Crocker Industrial Park</p>

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## SOLANO COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
	VALLEJO SANITATION AND FLOOD CONTROL DISTRICT  BENICIA, CITY OF  FAIRFIELD-SUISUN SEWER DISTRICT  Cordelia Sanitation District  Travis Air Force Base  VACAVILLE, CITY OF  RIO VISTA, CITY OF	Vallejo  Benicia  Fairfield, Suisun City, Green Valley  Cordelia  Travis Air Force Base  Vacaville  Rio Vista



TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## SONOMA COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>EASTERN MARIN-SOUTHERN SONOMA joint powers agreement</p> <p>Petaluma, City of</p> <p>Sonoma Valley County Sanitation District (See Marin County for other participating agencies)</p> <p>Sonoma, County of</p>	<p>PETALUMA, CITY OF</p> <p>SONOMA VALLEY COUNTY SANITATION DISTRICT</p>	<p>Petaluma</p> <p>Boyes Hot Springs, El Verano, Glen Ellen, Sonoma, Schel- lville, Fetter Hot Springs, Aqua Caliente</p>

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## SANTA CLARA COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>SOUTH BAY DISCHARGERS AUTHORITY (SBDA)</p> <p>Palo Alto, City of</p> <p>Sunnyvale, City of</p> <p>Santa Clara, City of</p> <p>San Jose, City of</p> <p>Milpitas, City of</p>	<p>PALO ALTO, CITY OF</p> <p>East Palo Alto Sanitary District (in San Mateo County)</p> <p>Las Encinas Sanitary District</p> <p>SUNNYVALE, CITY OF</p> <p>SAN JOSE - SANTA CLARA, CITIES OF</p> <p>Burbank Sanitary District</p> <p>County Sanitation District No. 2</p> <p>County Sanitation District No. 3</p> <p>County Sanitation District No. 4</p> <p>Campbell Sanitary District Los Gatos Sanitary District (part of)</p>	<p>Palo Alto, Stanford University, Los Altos, Los Altos Hills, Moun- tain View, Barron Park, Moffett Field</p> <p>East Palo Alto</p> <p>Sunnyvale</p> <p>Campbell Los Gatos</p>

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

SANTA CLARA COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
	<p>Monte Sereno Sanitary District</p> <p>Saratoga Sanitary District (part of)</p> <p>Cupertino Sanitary District</p> <p>Milpitas Sanitary District</p> <p>San Jose, City of</p> <p>Santa Clara, City of</p> <p>Sunol Sanitary District</p> <p>GILROY, CITY OF</p> <p>Morgan Hill, City of</p>	<p>Monte Sereno</p> <p>Saratoga</p> <p>Cupertino</p> <p>Milpitas</p> <p>San Jose</p> <p>Santa Clara</p> <p>Gilroy</p> <p>Morgan Hill</p>



TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

## SAN MATEO COUNTY

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>SOUTH SAN FRANCISCO-SAN BRUNO joint powers agreement</p> <p>South San Francisco, City of</p> <p>San Bruno, City of</p> <p>MILLBRAE-BURLINGAME joint powers agreement</p> <p>Millbrae, City of</p> <p>Burlingame, City of</p> <p>MILLBRAE-BURLINGAME-SAN FRANCISCO INTERNATIONAL AIRPORT-SOUTH SAN FRANCISCO-SAN BRUNO joint powers agreement</p>	<p>Bayshore Sanitary District (tributary to San Francisco)</p> <p>Guadalupe Valley Municipal District (tributary to San Francisco)</p> <p>SAN BRUNO-SOUTH SAN FRANCISCO, CITIES OF</p> <p>South San Francisco, City of</p> <p>San Bruno, City of</p> <p>MILLBRAE, CITY OF</p> <p>BURLINGAME, CITY OF</p> <p>Burlingame Hills Sewer Maintenance District</p> <p>SAN FRANCISCO INTERNATIONAL AIRPORT</p>	<p>Daly City (part of)</p> <p>Brisbane, Crocker Industrial Park</p> <p>South San Francisco</p> <p>San Bruno</p> <p>Millbrae</p> <p>Burlingame</p> <p>Hillsborough (part of)</p> <p>San Francisco Airport</p>

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

# JOINT POWERS AGREEMENTS

## Participating Agencies

## SERVICE AREAS

Devonshire County Sanitation  
District

TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

SAN MATEO COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
<p>San Carlos, City of</p> <p>Redwood City, City of</p>	<p>Emerald Lake Heights Sewer Maintenance District</p> <p>Harbor Industrial Maintenance District</p> <p>San Carlos, City of</p> <p>Scenic Heights County Sani- tation District</p> <p>REDWOOD CITY, CITY OF</p> <p>Fair Oaks Sewer Maintenance District</p> <p>General Improvement District 1-64</p> <p>Kensington Sewer Maintenance District</p> <p>Oak Knoll Sewer Maintenance District</p>	<p>San Carlos</p> <p>Redwood City (part of)</p> <p>Woodside (part of), Atherton (part of), Redwood Shores</p>



TABLE 1 (Continued)

## AGENCIES WITH WASTEWATER MANAGEMENT RESPONSIBILITY

SAN MATEO COUNTY  
(Continued)

JOINT POWERS AGREEMENTS Participating Agencies	MUNICIPAL DISCHARGERS Tributary Agencies	SERVICE AREAS
Menlo Park, City of	MENLO PARK SANITARY DISTRICT	Atherton (part of), Menlo Park, Redwood City (part of), Por- tola Valley,* Wood- side (part of),* *not in district but sewered into it
SEWER AUTHORITY MIDCOASTSIDE (SAM)		
Half Moon Bay, City of	HALF MOON BAY, CITY OF	Half Moon Bay
Granada Sanitary District	GRANADA SANITARY DISTRICT	El Granada, Princeton
Montara Sanitary District	MONTARA SANITARY DISTRICT	Montara
	PACIFICA, CITY OF	Pacifica
	NORTH SAN MATEO COUNTY SANI- TATION DISTRICT	Colma (part of), Daly City (part of), San Francisco (part of), South San Francisco (part of)
	Westborough County Water District	

needs, and in some cases the long-term needs, of the agencies involved. Table 2 shows the status of the wastewater solids facilities planning.

b. County Health Department. In each county in the study area, the County Health Department enforces State minimum standards for the handling and disposal of solid wastes in unincorporated portions of the county. It may negotiate contracts with each city to perform this function in the cities, as Santa Clara County does. The Health Department enforces the provisions of the County's disposal site permits.

c. Other Agencies. County Public Works Departments are usually responsible for building and safety review of new facilities. County Planning Departments issue land use permits in unincorporated areas.

#### 4. Cities

Local governments are responsible for enforcing State and Federal minimum standards for the handling and disposal of solid wastes, and for wastewater solids as a type of waste. Cities have municipal ordinances governing storage, collection, and disposal, which must conform to State regulations. The ordinance usually consists of a statement of policy, storage regulations, collection and haul regulations, allowable disposal methods and disposal site operations, and a schedule of fees. The local ordinances also speak to the acquisition of disposal sites. Other responsibilities include land use zoning and planning, approval, and licensing for all solid waste processing and disposal facilities, designating service areas and franchised territory, and regulating charges and fees.

### G. JURISDICTIONAL FACTORS

#### 1. General

The Wastewater Solids Study forms a framework for combining and interrelating the wastewater management, planning, and regulatory agencies within the study area. A Joint Exercise of Powers agreement forms the basic structure of the study and establishes the relationship of these functions (Reference 1). The four major agencies participating in the Study under a Joint Exercise of Powers agreement are the City and County of San Francisco, the City of San Jose, the Central Contra Costa Sanitary District, and the East Bay Municipal Utility District.

TABLE 2  
WASTEWATER SOLIDS FACILITIES PLANNING

Subregion	Subarea	Facilities Planning Step*	Estimated Completion Date as of May 30, 1977
South Bay	San Jose-Santa Clara	3	1978
	Palo Alto	2	1978
	Sunnyvale	3	March 1978
San Mateo	Redwood City	2	Oct. 1977
	North Bayside	2	Sept. 1977
	Half Moon Bay	1	
San Francisco	Southeast Plant	2	June 1977
	Master Plan	1	March 1978
	Southwest Plant	Pre-1	n.d.
Marin-Sonoma	South-Central Marin	1	Dec. 1977
	North Marin-South Sonoma	1	Dec. 1977
Napa-Solano	Napa	1	Dec. 1977
	Vallejo	1	Dec. 1977
	Benicia	2	Dec. 1977
Contra Costa	Central	2	In progress
	East County	1	Sept. 1977
	Hercules-Pinole	1	Sept. 1977
	Richmond-San Pablo	1	Sept. 1977
Livermore-Amador Valley	Livermore VCSD	1	June 1977
East Bay	EBMUD	3	Dec. 1978
	EBDA	1	Sept. 1977

\*Step 1 = Facilities Plan; Step 2 = Design plans and specifications;  
Step 3 = Construction.



The California Regional Water Quality Control Board, San Francisco Bay Region, participates in the study under the agreement. The State Water Resources Control Board (SWRCB) coordinates planning with the State Solid Waste Management Board. The U.S. Environmental Protection Agency (EPA) and the SWRCB are responsible for coordinating the study with Public Law 92-500, Title 2, Section 208, Planning Study of the Association of Bay Area Governments (ABAG).

The Policy Board of the Study directs and controls the study. It contains one representative of each party to the agreement, including representatives from East Bay Municipal Utility District, Central Contra Costa Sanitary District, Regional Water Quality Control Board, State Water Resources Control Board, San Francisco, San Jose, and the EPA. Figure 3 shows the organization of the Study.

The East Bay Municipal Utility District, the designated lead agency, is responsible for providing administrative, financial and legal services.

## 2. Planning

The Wastewater Solids Study will develop a regional wastewater solids management policy in the context of overall regional environmental management planning. ABAG was designated as a Section 208 planning agency under the Federal Water Pollution Control Act amendments, with the responsibility of preparing an Environmental Management Plan. A Memorandum of Agreement between the Association of Bay Area Governments and the East Bay Municipal Utilities District established the Wastewater Solids Management Study results would be provided as a component of that plan (Reference 2). The Joint Exercise of Powers Agreement, which established the study, requires that the regional plan be unanimously approved by the participating agencies prior to the development of the detailed facilities plan. Staged facilities necessary to implement the regional plan will be developed for the four major treatment agencies, in accordance with Federal and State requirements.

## 3. Regulation

The Wastewater Solids Study Governmental Advisory Group provides coordination with Federal, State, regional, and local agencies concerned with, or with jurisdiction over, the processing and disposal of wastewater solids. This group meets quarterly to review the work of the study and to provide information on the regulatory concerns of each participating agency. The Study Staff sits in on the Environmental Management Task Force technical advisory committees to insure coordination with ABAG and the components of its program. The Staff Review Committee is composed of high-level technical representatives of the participating agencies and ABAG. Its functions

are to review the progress of the study, to provide technical information as requested, and to keep individual members of the Policy Board apprised of the Study's progress.

#### 4. Management

Wastewater solids management is conducted on the subregional level by the wastewater treatment agencies, which are responsible for the treatment and disposal of wastewater solids within the area under their jurisdiction. These agencies, identified in Table 2, are responsible for implementing facilities plans. The four largest wastewater treatment agencies in the Bay Region--the City and County of San Francisco, the City of San Jose, the Central Contra Costa Sanitary District, and the East Bay Municipal Utility District--as participants in the Wastewater Solids Study, will seek long-term solutions to wastewater solids disposal.

The urban subregional and individual agencies will face long-term needs similar to those of the major urban agencies. Landfill disposal will become increasingly costly, making other options more attractive. The rural subregional and local agencies' needs will be less acute than those of the urban agencies, and present practices will probably serve rural long-term needs.

### H. PLANNING REQUIREMENTS

#### 1. ABAG Environmental Management Plan

This plan is being prepared under Section 208 of the Water Pollution Control Act Amendments of 1972, which requires the preparation of areawide water quality management plans in urban/industrial areas. EPA decided that in this region the plan should also address air quality and solid waste. The Environmental Management Plan is being prepared by ABAG in cooperation with local, regional, State, and Federal agencies. The Plan will include seven management components: surface runoff; air quality maintenance; municipal wastewater facilities; nonpoint sources of water pollution; industrial discharges; water conservation, reuse, and supply; and solid waste (including municipal wastes, hazardous wastes, and wastewater residuals). The environmental, social, and economic impacts of the selected management plans will be assessed to form a basis for selecting control measures for the management plans. A continuing planning program will monitor plan implementation, update the management plan, provide the general public and agencies with information on the environmental management plan and elicit responses to that information, and continue to identify environmental issues and methods for dealing with them.



## 2. BAYSWAMP and COSWAMP

The Bay Area Solid Waste Management Project involved the development of a comprehensive solid waste management program for the San Francisco Bay Area. The intent of the study was to evaluate all reasonable approaches and to recommend actions or projects that would provide local, State, and Federal officials with knowledge and recommendations for decision making to establish a solid waste management program. The objectives of the study were to establish sets of priorities for managing the Bay Area's solid wastes. Phase 1 of the study has been completed. The report concludes that solid wastes must be managed according to the State's minimum standards and those standards must be properly enforced. A detailed evaluation of alternatives will be conducted over the next two years.

Each county in the study area has produced a Solid Waste Management Plan (COSWAMP) in accordance with the provisions of the Nejedly-Z'Berg-Dills Solid Waste Management and Resource Recovery Act of 1972. The act is intended to promote the management of solid wastes in a manner that will protect the public health, safety, and well-being, protect the environment, and preserve natural resources by encouraging source reduction of wastes and providing for the maximum reutilization and conversion to other uses of waste materials. Generally, the plans were prepared by the County Planning Departments or the Departments of Public Works and approved by the County Boards of Supervisors. In Napa and Santa Clara Counties the plan is under consideration by the Board of Supervisors; the plans of several counties are now under review by the State Solid Waste Management Board.

## 3. County and Local Agencies

Counties have the primary responsibility for solid waste planning as discussed above under COSWAMP. The county agencies are also responsible for land use planning and for the administration of ordinances to implement the land use elements of general plans, including zoning ordinances. Cities are responsible for land use planning within their jurisdiction and for administration of the local codes related to land use, health, and safety. They issue permits for disposal sites.

## 4. Existing 201 Facilities Planning

Pursuant to the Federal Water Pollution Control Act Amendments of 1972, municipal facilities are required to provide at least secondary treatment of wastewater by 1977 and best practicable treatment by 1983. In the Bay Area, planning for water quality management has been carried out under Section 201 of the Amendments. The 201 facilities plans provide a planning base for the control of municipal and industrial waste discharges. More than



fifty projects for municipal wastewater facilities are in stages of planning, design, and construction (Reference 3). Planning is either completed or nearing completion in all subregions of the Basin. The ABAG Environmental Management Plan will build on existing planning and will be coordinated with current planning.

REFERENCES  
SECTION IV

1. Regional Municipal Wastewater Solids Management Study, Joint Exercise of Powers Agreement, Berkeley, December 1975.
2. Regional Municipal Wastewater Solids Management Study, Memorandum of Agreement, Oakland, June 8, 1975.
3. Association of Bay Area Governments, Environmental Management Plan: Work Program Summary, Berkeley, April 1976.
4. Prosser, William L., Handbook of the Law of Torts, 4th ed., West Publishing Company, 1971, Chapter 15, p. 571 et seq.
5. Aldred's Case, 1611, 9 CO. Rep. 77, 77 Eng. Rep. 816; see Reference 4, p. 591.
6. Hedrick v. Tubbs, 1950, 120 Ind. App. 326, 92 N.E. 2d, 561; see Reference 4, p. 591.
7. Everett v. Paschall, 1910, 61 Wash. 47, 111 P. 879.
8. East St. Johns Shingle Co. v. City of Portland, 1952, 195 Or. 505, 246 P. 2d, 554.
9. U.S. Environmental Protection Agency, "Municipal Sludge Management: Environmental Factors," Federal Register 41 (108) June 3, 1976.
10. California State Water Resources Control Board, Water Quality Control Plan Report: San Francisco Bay Basin (2), April 1975.





SECTION V  
CONCERNED GROUPS AND ORGANIZATIONS

A. INTRODUCTION

It is of critical importance to the success of the Wastewater Solids Study that the public have an opportunity to participate in and contribute to the actual development of the Regional Plan. Issues considered important at the local level by key citizens should be identified early, and contact with concerned members of the public should be made in order to insure a positive outcome to the study.

Public interest should intensify once site-specific issues are well defined and the local citizens become increasingly aware that a wastewater solids treatment process may affect some aspect of their "style of life."

In highly urbanized areas, citizens appear to be concerned about the cost of recommended solutions in terms of potential tax increases and disruption during the construction of facilities. In rural areas, the concerns appear to be focused on the need for more information on potential environmental and health risks of land application and costs for transporting sludge to agricultural areas.

This section contains a list of individuals and the agencies, organizations, and administrations they represent who participated in the preparation of the solid waste management plans (Senate Bill 5) for the nine Bay Area counties.

Because SB 5 plans included a look at sludge management methods, it was assumed that the people on the advisory Committees for the solid waste management plans would probably have some interest in the Wastewater Solids Study and could serve as initial contact for the public participation program.

County officials responsible for producing their county's solid waste management plan and representatives of subregional wastewater treatment agencies were interviewed by members of EIP and the Wastewater Solids Study staff. They were asked to identify key citizens within their jurisdiction; the names of these citizens are included in this report.

This list should be regarded as a preliminary listing of key citizens, concerned individuals, and groups. It provides a basis for a record of names continuously being expanded as more contacts with the public are being made by EIP and the public participation coordinator.

B. SOLID WASTE ADVISORY COMMITTEE MEMBERS AND OTHER INTERESTED CITIZENS

The members of the Solid Waste Management Committee for each of the nine counties in the Bay Area are listed by county. In some counties, additional committees such as the technical advisory or citizens' advisory committee were established. For those counties, the list includes committees containing concerned citizens. Technical Advisory Committees are usually composed of public agency officials who, by the nature of their position, would probably be concerned with issues related to wastewater management; they are not included in these lists.

Interested citizens identified through interviews and participation in wastewater management environmental impact reports for various regions in the Bay Area are also listed by county. All are listed by name, affiliation, and residence. People on the Wastewater Solids Study mailing list are identified by an asterisk (\*).

1. Alameda County

Solid Waste Management Committee

County Officials

W. Wilson Sampson, Ph.D.  
Bureau of Environmental Planning  
Oakland

Hiram Welch, Ph.D.  
Comprehensive Health Planning Council  
Castro Valley

City Officials/Representatives

Chuck Corica  
Mayor  
Alameda

William Herlihy  
Councilman  
Pleasanton

Gail Steele  
Councilwoman  
Hayward

Dale Turner  
Vice Mayor  
Livermore

Wallace Fox  
Mayor  
Emeryville

Don Miller  
Councilman  
Livermore

### Industry Representatives

Ed DePaoli  
DePaoli Equipment, Inc.  
Livermore

James W. Fahrner  
Berkeley Landfill Company  
Berkeley

Lee Martin  
AAA Engineering Co.  
Hayward

Thomas Meichtry  
Oakland Scavenger Co.  
Oakland

Lou Schmitz  
Oakland Scavenger Co.  
Oakland

Gary Schnitzer  
Schnitzer Steel Products  
of California, Inc.  
Oakland

### Other Organizations and Private Citizens

Sara Conner  
Citizen  
Castro Valley

Franklin Hurlbut  
Citizen  
Berkeley

Gus Levy  
Citizen  
Alameda

Carl Olsen  
Citizen  
Oakland

Ariel Parkinson\*  
Citizen  
Berkeley

Lois Hill  
Citizen  
Livermore

Greg Schluntz  
Citizen  
Hayward

W. L. Williams  
Citizen  
Fremont

Clifford E. Heisterberg  
Citizen  
San Leandro

### Other Interested Citizens

Louisa Jaskulski  
Citizen  
Oakland

Gerald Winn  
Health Care Services Agency  
Oakland

Sally Harris  
Citizen  
Castro Valley

James W. Trimmingham  
Citizen  
Pleasanton

Hiram Wolch, Ph.D.  
Citizen  
Castro Valley

Dr. Gerald Meral  
Sierra Club  
Oakland



## 2. Contra Costa

### Solid Waste Management Committee

#### County Officials

Shirley M. Smith  
Comprehensive Health Planning Association  
Antioch

James P. Kenny\*  
Board of Supervisors  
El Sobrante

Edmund A. Linscheid  
Board of Supervisors (Formerly)  
Pittsburg

#### City Officials/Representatives

Laurence B. Azevedo  
Councilman  
Concord

George Lowy  
Councilman  
Pittsburg

Gregory A. Cook  
Councilman  
El Cerrito

Mel Whatley  
Councilman  
Antioch

Margret W. Kovar  
Mayor  
Walnut Creek

Don Wagerman  
Councilman  
Richmond

#### Sanitary District Representatives

Daniel L. Yee  
San Pablo Sanitary District  
Richmond

J. L. (Ben) Griffanti  
Mountain View Sanitary District  
Martinez

John A. Bohn  
Central Contra Costa Sanitary District  
Walnut Creek

Earl Wetzel  
Byron Sanitary District  
Byron

### Industry Representatives

Richard M. Granzella  
Richmond Sanitary Service  
Richmond

Louis Mascheroni  
Pittsburg Disposal Service  
Pittsburg

Boyd M. Olney, Jr.  
Pleasant Hill-Bayshore Disposal  
Pleasant Hill

Henry W. Simonsen  
Industrial Tank, Inc.  
Martinez

### Other Organizations and Private Citizens

Louise Gunn  
League of Women Voters  
Orinda

Harry G. Reeves  
Sierra Club  
Oakley

### Other Interested Citizens

Barbara McCormick\*  
League of Women Voters  
Walnut Creek

Sue Watson  
Citizen  
Orinda

Rosemary Aguilar  
Councilwoman  
Antioch

Joanne Johnson  
Citizen  
Lafayette

Rachel Reilly  
Citizen  
Antioch

Stan Davis  
Citizen  
Antioch

Holly O'Konski  
League of Women Voters  
Lafayette

Mrs. Charles Carnduff  
Pittsburg Environmental  
Council  
Pittsburg

Richard Juba  
Antioch Environmental  
Council  
Antioch

Laine Lawrence  
Citizen  
Brentwood

Gus Leptien  
Citizen  
Martinez

Molly Reeves  
Citizen  
Oakley

Joanne Dean  
Sierra Club  
Brentwood

Mrs. Billy Pfozter  
Citizen  
Antioch

Thayer Johnson  
Antioch Environmental  
Council  
Antioch

### 3. Marin County

#### Solid Waste Management Committee

##### County Officials

Ray W. Foreaker  
Public Works Department  
San Rafael

##### City Officials/Representatives

Dr. Michael Hertz  
Belvedere

Cliff Temps  
Corte Madera

Dale White  
Novato

Frederick S. Allen  
Ross

Judy Alstrom  
Fairfax

Holger R. Peters  
San Anselmo

William Webb  
Larkspur

Norman Wohlschlaeger  
Sausalito

William Cunningham  
Mill Valley

Louis Brunini  
Tiburon

##### Industry Representatives

Jordon Smith  
Redwood Sanitary Landfill, Inc.  
Sonoma

Joseph Garberino  
Marin Sanitary Services  
San Rafael



Sanitary District Representative

Charles A. Joseph  
Sanitary District No. 6  
Novato

Other Organizations and Private Citizens

Ted Wellman  
Marin Conservation League  
Kentfield

Angie Campbell La Franchi  
West Marin Property Owners  
Nicasio

Elisa Harman  
Survival, Inc.  
San Rafael

Mrs. Bruce Duncan  
League of Women Voters  
Fairfax

Other Interested Citizens

Jean S. Barnard\*  
Citizen  
Mill Valley

Gleen Meagher\*  
Citizen  
Fairfax

Bruce Desmond  
County Environmental Health  
Officer  
San Rafael

Susan Clarke  
League of Women Voters of  
Southern Marin  
San Rafael

Elva Edger  
League of Women Voters of  
Southern Marin  
Tiburon

4. Napa

Solid Waste Management Committee

County Officials

Harry D. Hamilton, P.E.\*  
Public Works Department  
Napa

Aldo Delfino  
Agriculture Commissioner  
Napa

Anthony McClimans  
Conservation, Development and Planning Department  
Napa

Alphons Van Woerkon  
Division of Environmental Health  
Napa

#### City Officials/Representatives

Kenneth Taplin\*  
Public Works Department  
Calistoga

Kent Payne  
Office of City Manager  
Napa

Keith Fraser, P.E.\*  
St. Helena

Peter J. Bardessono  
Public Works Department  
Yountville

#### Industry Representatives

William Bacigalupi  
Napa Garbage Services, Inc.  
Napa

Robert Pestoni  
Upper Valley Disposal Services  
St. Helena

#### Citizens Solid Waste Committee

Kenneth Dipbert, P.E.  
American Canyon

Milo Anderson  
Angwin

C. W. Smith  
Council Member  
Calistoga

William Uren  
Agricultural Interests  
St. Helena

Dr. Curtis Fronke  
Education Interests  
Napa

Dr. John Poort  
Napa

Ronald McGowan  
St. Helena

Dr. T. Atwood  
Yountville

Robert Dwyer  
Napa County Farm Bureau  
St. Helena

Robert Heid, P.E.  
Yountville

Claude Sterling  
Education Interests  
Angwin

Mary Constantini  
Environmental and Recycle  
Interests  
Napa

Lora R. Levin  
Environmental and Recycle  
Interests  
Napa

#### Other Interested Citizens

Polly Rose\*  
League of Women Voters  
Napa

George C. Spurling  
Napa Opposed to Wastelands  
Yountville

### 5. San Francisco

#### Solid Waste Management Committee

##### Industry Representatives

Manuel (Leo) C. Conte  
Golden Gate Disposal Co.

Elmer E. Hall  
Pacific Gas & Electric Co.

Lon Hanke  
Associated General Contractors

Arthur (Buzz) Haskins  
Excavating Contractor

Leo Maionchi  
Sunset Scavenger Co.

Harry Pariani  
Engineering & Grading  
Contractors Association

Milton Schwartz  
Piombo Construction Company

##### Other Organizations and Private Citizens

Don Neel  
Sierra Club



Lucy Domin  
Richmond Environment Action

Harrison C. Heyl  
San Francisco Beautiful

Herman Mueller  
Citizen

Other Interested Citizens

Allen Mitchum\*  
Board of Supervisors  
Representative

Harold Madison\*  
Board of Supervisors  
Representative

George Tainter\*  
Board of Supervisors  
Representative

Richard Lantz\*  
Board of Supervisors  
Representative

General Paul D. Berrigan\*  
Mayor Representative

Bernard Speckman\*  
Mayor Representative

Jack Oppenheimer\*  
Mayor Representative

Marguerite Warren\*  
Mayor Representative

Ethel Garlington\*  
Bayview-Hunters Point Model  
Neighborhood Commission

Chapman Wentworth\*  
Cow Hollow Improvement  
Association

Jane Nurre\*  
League of Women Voters

Roy Scola\*  
Marina Civic Improvement and  
Property Owners Association,  
Inc.

Henry Jefferson\*  
OMI Community Association,  
Inc.

Terrence Ryan\*  
Planning Association for the  
Richmond (PAR)

Douglas Craig\*  
Sierra Club

Albert Everitt\*  
San Francisco Beautiful

Redmond Kernan\*  
San Francisco Planning and  
Urban Renewal (SPUR)

John Stark\*  
San Francisco Tomorrow

S. Andrew Jacobs\*  
Save San Francisco Bay  
Association

Violet Gallagher\*  
Southern Promotion Association

Mark Kasky\*  
Ecology Center of San  
Francisco

Richard Kennedy\*  
San Francisco Chamber of  
Commerce

Richard L. Wilson, Jr.\*  
Great Highway Neighborhood  
Association

James Walsh, Jr.\*  
Sunset-Parkside Education and  
Action Committee (SPEAK)

Zonnell Butler\*  
Plan of Action for Challenging  
Times (PACT, INC.)

## 6. San Mateo

### Solid Waste Management Committee

#### County Officials

P. Duffy  
Vector Control Specialist  
San Carlos

H. F. Eich  
Public Health Engineer  
Belmont

D. A. Woolfe\*  
Planning Director  
Belmont

S. H. Cantwell, Jr.  
County Engineer  
Menlo Park

M. D. Tarshes  
County Manager  
San Mateo

#### City Officials/Representatives

B. Trailer  
Assistant Sanitary Engineer  
Belmont

M. R. Stewart  
Councilman  
Daly City

J. McGrew\*  
Councilman  
Foster City

J. Marmont  
Councilman  
Half Moon Bay

N. Stiene  
City Manager  
Hillsborough

L. Van Dusen\*  
Public Works  
San Bruno

P. F. Goercke  
Councilman  
Brisbane

V. A. Mangini  
Vice Mayor  
Burlingame

C. R. Allen  
City Administrator  
San Carlos

J. Chalmers  
Councilman  
San Mateo

R. Stephens  
Councilman  
Menlo Park

V. F. Padovan\*  
Public Works  
Millbrae

J. Fulford\*  
Mayor Pro Tem  
Pacifica

R. H. Anderson  
Councilman  
Portola Valley

J. S. Williams  
Councilman  
Redwood City

A. Bergeron  
Superintendent of Maintenance  
San Mateo

F. Addiego\*  
Director of Public Works  
South San Francisco

O. Mayer  
Councilperson  
Woodside

H. Anthony  
East Palo Alto Municipal  
Council  
Palo Alto

#### Industry Representatives

L. J. Devincenzi  
San Mateo County Scavenger  
Company  
San Mateo

J. J. Zucca  
South County Garbage & Refuge  
Disposal District  
Belmont

#### Other Organizations and Private Citizens

D. Kallstrom  
Citizen  
Atherton

P. C'de Baca  
Citizen  
Colma

L. Craig\*  
League of Women Voters  
Menlo Park



## Other Interested Citizens

Fred Martin  
Sierra Club  
Menlo Park

Sherman Coffman  
Local Agency Formation Committee  
Redwood City

Carol Barett  
League of Women Voters  
Menlo Park

Harland Minshew  
Councilman  
Pacifica

Dwight French  
Citizen  
Pacifica

## 7. Santa Clara

### Solid Waste Management Committee

#### County Officials

Roy Cameron  
County Planning Department  
Saratoga

Warren Terriberry\*  
County Planning Department  
Cupertino

Bruce Freeland  
County Planning Department  
San Jose

Manny Pearl  
County Health Department  
San Jose

Ben Torrecillas  
County Transportation Agency  
San Jose

#### City Officials/Representatives

Bruce Bane  
Los Altos

Dick Cox  
Gilroy

Sam Cristofano\*  
City of Santa Clara

Allen Shelley\*  
Mountain View

Son Sommers\*  
Sunnyvale

Gene Toschi  
San Jose

Terry Ellis  
City of Campbell

Dan Trinidad  
Saratoga

Dave Holton  
Palo Alto

John Vaughn  
Cupertino

George Lewis  
Morgan Hill

R. L. Warnich\*  
Los Gatos

Burt Olmstead\*  
City of Monta Sereno

John Wyro  
Milpitas

Alec Russell\*  
Los Altos Hills

#### Industry Representatives

Neal Beck  
Palo Alto Sanitation  
Palo Alto

Paul Madsen  
Clara Mateo Garbagemen's Association  
San Jose

Steve Musante  
Nine-Par Company  
Los Altos

Amiel Zanardi  
Green Valley Disposal Company  
Los Gatos

#### Other Interested Citizens

Velma Million\*  
Council for a Balanced  
Community  
San Jose

Edward Hahamian  
Citizen  
Cupertino

Brenda McHenry\*  
League of Women Voters  
San Jose

L. J. Hendricks  
Citizen  
San Jose

Ben Castro  
Citizen  
San Jose

Diane Paul  
Citizen  
Cupertino

Melvin Cobb  
Citizen  
Mountain View

## 8. Solano

### Solid Waste Management Committee

#### County Officials

Thomas Hannigan  
County Supervisor  
Fairfield

Robert Scofield  
County Supervisor  
Vallejo

#### City Officials/Representatives

Claude Appleton  
City Council  
Suisan

John Berg  
City Council  
Dixon

Robbieburr Berger\*  
City Council  
Fairfield

Manuel Cardoza  
City Council  
Rio Vista

Terry Curtola  
City Council  
Vallejo

Bill Jenkins  
City Council  
Fairfield

Mary E. McKay  
City Council  
Benicia

Lowell Morris  
City Council  
Dixon

Robert Pokorny  
City Council  
Vacaville

James Stewart  
City Council  
Rio Vista

### Citizen's Advisory Committee

Calvin Anderson  
Solano County Farm Bureau  
Birds Landing

Paul E. Barney\*  
Solanoans Organized for  
Survival  
Vallejo

Commander Wayne Collins  
Mare Island Naval Shipyard  
Vallejo

Julia Nordeen  
Green Valley Homeowners  
Association  
Green Valley

Christopher L. Overlock  
Sierra Club  
Vallejo

Alex Pezzuto  
Downtown Merchants Association  
Vallejo



Dr. William Coon  
Suisun Resource Conservation  
District  
Vallejo

Fred Hoff  
Basic Vegetable Products  
Vacaville

James L. Leach  
Travis Air Force Base

Dr. George Mitchell  
Exxon Company U.S.A.  
Benicia

Bruce Moore  
Downtown Business Association  
Fairfield

John Weldon\*  
Solano County Taxpayers  
Association  
Benicia

Carol Rich  
League of Women Voters  
Benicia

Neel Rich  
Benicians for Environmental  
Action  
Benicia

Jack Wade  
SAVE  
Vacaville

Henry Watson  
Vallejo Improvement  
Association  
Vallejo

#### Other Interested Citizens

Phil Kay  
Sierra Club  
Vallejo

Cynthia Kay  
Citizen  
Vallejo

Everett Mossman  
Solanoans Organized for  
Survival  
Vallejo

Margaret Burgett  
Citizen Taxpayers Association  
Vallejo

#### 9. Sonoma

##### Solid Waste Management Committee

###### County Officials

J. Conaway\*  
Staff Engineer  
Sebastopol

D. Butler\*  
Assistant Director of  
Public Works  
Santa Rosa

L. Bennett\*  
Director, Environmental  
Health Services  
Santa Rosa

J. Graham\*  
Staff Planner  
Santa Rosa

R. Tancretto  
North Coast Regional Water  
Quality Control Board  
Santa Rosa

S. Allsop  
County Water Agency  
Santa Rosa

G. Kovatch\*  
Planning Director  
Santa Rosa

D. Head\*  
Director of Public Works  
Santa Rosa

#### City Officials/Representatives

R. Bandiera  
Councilman  
Cloverdale

B. Davis  
Planning Commissioner  
Cotati

B. Rose  
City Engineer  
Healdsburg

D. Young  
City Engineer  
Petaluma

B. Leibel  
Community Services  
Coordinator  
Petaluma

J. Bois  
Building Official  
Sonoma

D. Eck  
Councilman  
Rohnert Park

B. Riha  
City Engineer  
Santa Rosa

R. Hamm  
Deputy Director, Field  
Services  
Santa Rosa

D. Shatto  
Councilman  
Sebastopol

R. Rowland  
City Engineer  
Sonoma

G. Clement  
Building Inspector  
Healdsburg

#### Industry Representatives

J. Ratto  
Sonoma County Refuse Control  
Cloverdale

T. Walters  
Redwood Empire Disposal Company  
Santa Rosa

Other Organizations and Private Citizens

D. Clayton  
League of Women Voters  
Santa Rosa

M. Anderson  
Garbage Reincarnation  
Santa Rosa

D. Cotter  
Environmental Center  
Santa Rosa

J. Cooley  
Garbage Reincarnation  
Bodega Bay

Other Interested Citizens

Bill Kortum  
Farmer's Group  
Petaluma

Lynn Collins\*  
League of Women Voters  
Santa Rosa

Mary Jo De Long\*  
League of Women Voters  
Santa Rosa

Patrick Wofford\*  
Ecology Action  
Santa Rosa



SECTION VI  
PUBLIC CONCERNS ABOUT TREATMENT OF  
WASTEWATER SOLIDS: A PROGRESS REPORT

The purpose of this sub-task is to identify local concerns and attitudes on the use and treatment of wastewater solids and to assess public acceptance of regional planning of various options for treating wastewater solids.

In late January 1977, EIP staff met with the Public Participation Coordinator to develop a work plan for the next four months. It was decided that EIP would provide research and assessment focused on political feasibility and public acceptance of regional wastewater treatment and disposal options, and that the Public Participation Coordinator would guide EIP's efforts and share information obtained from local and subregional agencies.

It is difficult to measure the political acceptance of wastewater solids disposal, since there is little historical precedent for public involvement in this area. Traditionally, disposal has been handled administratively by city governments and individual sanitation districts; public input has been limited to opposition when the disposal of a material caused a nuisance such as odors.

In recent years, legislation has required that public participation be incorporated in wastewater management programs. EIP decided to use interviews as a tool for assessing public acceptance factors and their impact on site selection and program implementation. These interviews would be conducted with agencies dealing directly with wastewater solids management and with planning on a regional level. The group selected as being representative of wastewater solids management were managers and operators of wastewater treatment systems in each subregion of the study area.

The first step in the work plan was to meet with representatives of twelve wastewater treatment agencies and discuss the following issues:

1. Specific problems for each subregion in the treatment of wastewater solids.
2. Ideas for solutions to these problems.
3. Long-term plans (if any) or ideas for future treatment.
4. Identification of local groups, organizations, or individuals who may have an interest in the Wastewater Solids Study.
5. Assessment of local political feasibility and public acceptance of the Wastewater Solids Study.

During the month of February 1977, meetings with the following representatives were held:

Wayne Bruce	- East Bay Dischargers Authority
Ron Doty	- South Bay Subregion
Ned Ongaro	- Marin-Sonoma County Subregion
William Braga	- West Contra Costa County Agency
Douglas Nelson	- Livermore-Amador Valley Water Management Agency
William Silva	- East Contra Costa Valley Agency
Dennis Scherzinger	- Napa and Solano County Subregion
Dick Pusich	- San Mateo County Subregion
James Coe	- Central Contra Costa Sanitary District
Elmer Ross	- East Bay Municipal Utility District
Louis Vagadori	- San Francisco, City and County
John Mackie	- San Francisco, City and County
Frank Belick	- City of San Jose

EIP and the Public Participation Coordinator met to review the twelve interviews and formulated several generalizations/trends obtained from the interviews:

1. Most agencies feel that either land use or land application may be the least expensive management method.
2. Most agencies are anxious to obtain information needed to assess their preferences for the long-term sludge disposal or use.
3. Eighty percent interviewed had ideas of what they would like to do with wastewater solids in the future, but not many had investigated the feasibility of their preferences.
4. Most felt that local elected officials, the State, and local departments of health would have influence on their project alternatives--not much mention of EPA regulations.
5. A role of the Wastewater Solids Study (WSS) is to insure that EPA regulation changes are communicated to the subregional agencies immediately.
6. Acceptability is most likely to hinge on a local-use cost basis. The public mind is not made up; and citizens must be educated.
7. Board members of subregional boards should be involved in the study and included on the mailing lists for workshops.
8. The State Department of Health is perceived to be the critical agency. The WSS must provide information on alternatives, funding sources and potential sources, methods for influencing regulatory agencies such as EPA and State Department of Health.

9. At this point, most people do not yet care about sludge management.

10. Key people in both the public and private sectors should be sought out and asked to participate at the beginning of the Study to reach a consensus at the end.

The next step was to obtain information on the solid waste management studies prepared by each county. EIP and the Public Participation Coordinator assumed that the planning experience of counties in developing solid waste plans could be useful in the preparation of the Wastewater Solids Study. Similar problems might exist in the two approaches to regional planning, and many of the factors in the development of the solid waste studies might be involved in the Wastewater Solids Study process.

In March 1977, EIP and members of the Wastewater Solids Study staff met with individuals who had the primary responsibility for developing their respective county's solid waste management plan. Each interview covered the following topics:

1. Status of the particular solid waste plan and its recommendation for wastewater solids management.
2. Identification of problems in the preparation of the plan.
3. Coordination with other agencies, institutions, government entities, etc.
4. Identification of individuals, groups, and organizations who worked on the solid waste plan and may have an interest in the Wastewater Solids Study.
5. Recommendations for the Wastewater Solids Study.

Below are the people interviewed and the counties they represent:

Ray Foreaker	- Marin
Bernie Klein	- Napa
Dan Head	- Sonoma
David Hubbell	- Solano
George Laakso	- San Mateo
Warren Terriberry	- Santa Clara
Jack Port and Steve Wright	- Contra Costa
Steve Richards	- Alameda
Stanford Snoek	- San Francisco

On March 23, 1977, EIP and Wastewater Solids Study staffs met to review information obtained in the above interviews. The following observations were made:



## 1. Management

For most counties (Sonoma a major exception), the preparation of a sub-regional solid waste plan was a new experience. Most counties had anticipated problems in developing a county-wide plan that had to consider the many vested interests of cities, private industry, taxpayer groups, and conservationists (environmentalists, recyclers, etc.). Counties with the greatest success had several factors in common:

a. The planners had a good working relationship with representatives from participating agencies, organizations, etc., which helped communication.

b. The committees (management and advisory) were a workable size; the larger counties (Contra Costa, Alameda, San Mateo) had too large a membership.

c. Members of the committees were kept informed weekly about the progress of the report, critical issues, and the people involved.

d. Revisions were kept to a minimum.

e. Strong management leadership helped direct the plan and was able to solicit constructive participation.

f. Background preparation was extensive: issues were identified early, and concerned parties were contacted directly at the beginning of the study. (Santa Clara County's study was delayed by one landowner who was able to muster large community support against the plan.)

## 2. Planning

Most counties thought that regional planning was a sound concept but difficult to implement due to the lack of funds and time, and to reluctance by cities and other agencies to participate in such efforts. Coordination and organization were critical, and few seemed optimistic about the success of any regional plan without enormous planning and management efforts.

The counties with the best success at planning were, again, the smaller counties, who had some leverage with private scavenger companies in development of a solid waste plan. (Sonoma County is the best example since the County owns all the landfill/dump sites.) In all counties, private scavenger companies participated in the planning effort. However, private scavenger companies did not necessarily agree in many cases with the recommendations of the planning agencies.

Some counties felt that the local citizens were not receptive to a regional planning effort since it could be construed as increased government control in an atmosphere of regulatory agencies--a taxpayers' revolt against expansion in the private sector.

Several county planners felt that the State was particularly insensitive to the local issues of the respective counties, set deadlines on too tight a schedule, and did not have a grasp of the actual implementation of the solid waste state of the art (e.g., the guidelines called for a greater percentage of resource recovery than was realistically possible to obtain).

### 3. Public participation

Several county representatives suggested the use of the ABAG environmental management forum as a mechanism for eliciting citizen concern and response to regional planning. There is some concern that environmentally-concerned groups and individuals might be "burned out" by too much exposure to environmental plans.

### 4. Information retrieval

Obtaining solid waste information from private industries was especially difficult; industries regarded any information as proprietary and were reluctant to release it to planners. Accurate statistical information for the development of the plan was harder to obtain than planners anticipated, due to the size of the study and the regional planning effort.

### 5. Financing

Most counties felt that they were too limited by funding resources to develop the plan at the level requested by the State. Extensive revisions in some counties were not possible without additional funding. Public participation was curtailed in most counties due to inadequate funding and to the management problems inherent in planning for full participation.

### 6. Future plans

EIP and the Public Participation Coordinator and staff will continue to meet with concerned agencies, organizations, and individuals to assess, as accurately as possible, the level of public acceptance of the Wastewater Solids Study, possible issues relating to political feasibility, and identification of other interested parties.

During the period allocated to interviews, a household survey was conducted by Gruen Gruen + Associates on attitudes toward wastewater treatment performed on a county-wide or regional basis. The survey was a marketing analysis of possible uses for wastewater solids, but each household was also asked, "What is your opinion on planning and treatment of sewage done on a county-wide or regional basis?" An explanation was also provided that most wastewater (sewage) treatment was currently done on a district-wide basis.

Of the 419 individuals who responded, about 275 (65 percent of the sample) felt that they were not informed enough to have an opinion. Of the remaining sample, 112 people (27 percent) thought that county-wide or regional planning was a good idea, and 30 (7 percent) stated it was a bad idea.

When asked why such planning is a good idea, most of the people responding stressed the possible economic advantage (less burden to taxpayers, more cost-efficient) and planning efficiency (less duplication and overlap between districts, more control over a regional problem). Some thought that regional planning would allow for higher standards in treatment and greater ecological/environmental protection. In general, people felt that district-level planning and treatment of wastewater solids was ineffective, costly, and actually a regional problem.

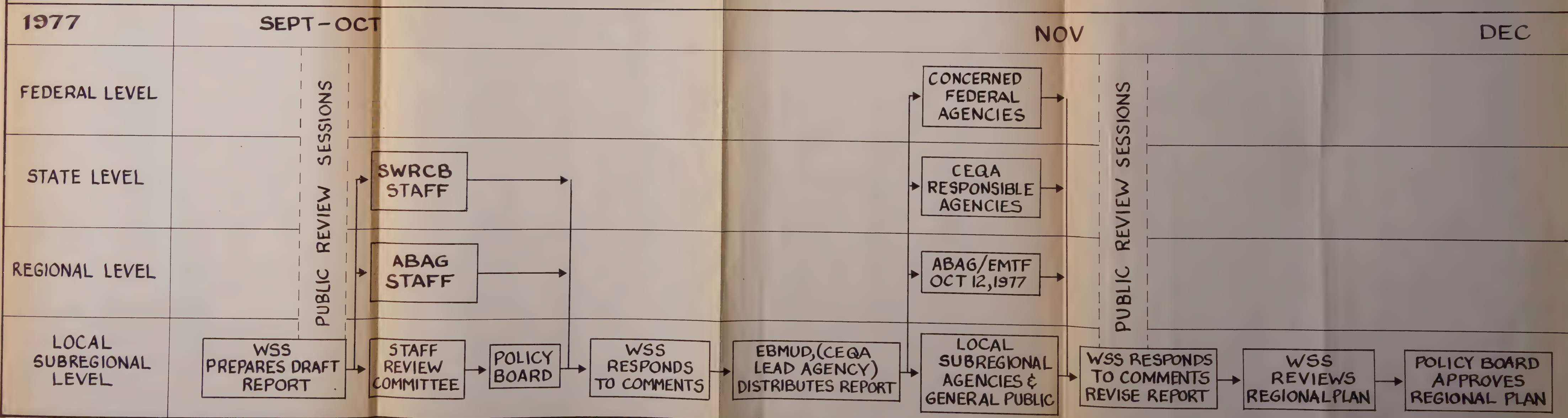
Those who stated that regional planning was not a good idea thought it would be more expensive for the property owner and taxpayer than district planning. These people tended to want to keep the status quo. Some expressed the opinion that regional or county-wide planning would be too cumbersome, that there would be an increase in bureaucratic "red tape", and that too many people would be involved. (One person who was in favor of regional planning thought that a possible increase in jobs would be beneficial.)

Gruen Gruen + Associates sampled areas in the entire Wastewater Study Region and surveyed a cross section of the population. In a sense, the results corroborate some of the generalizations formed in the interviews with representatives of the wastewater treatment agencies. Most people are uninformed about the process of wastewater treatment and the concept of regional planning and wastewater solids management. If regional planning and treatment did not result in an additional tax burden on the individual, most people would probably not be opposed to the concept.



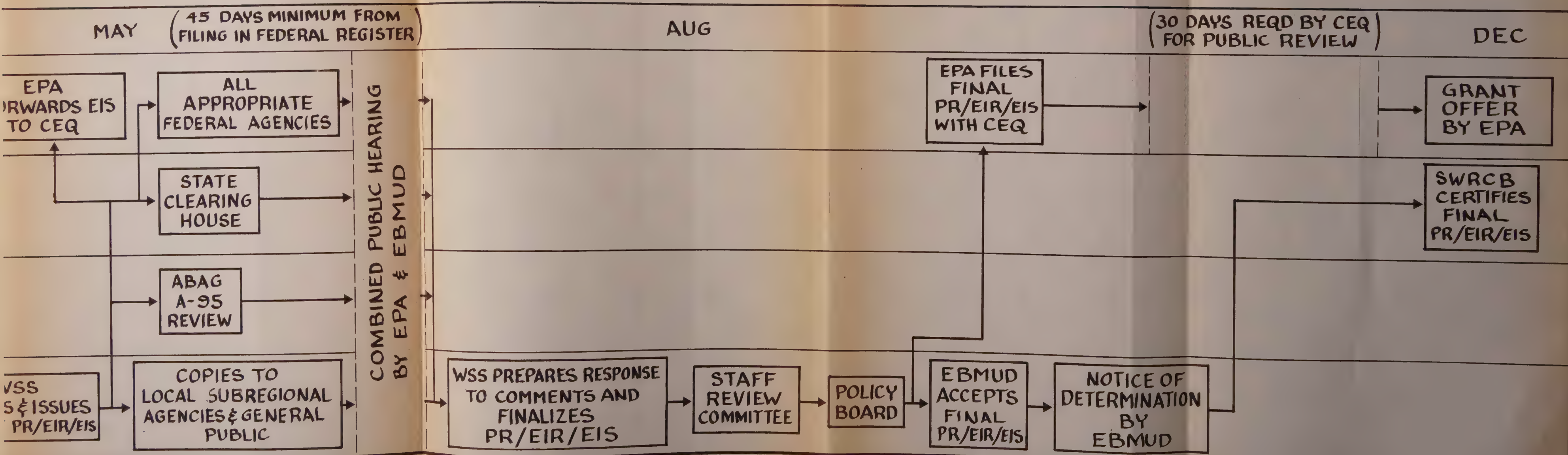
# REGIONAL PLAN REVIEW PROCESS (TASK 5)

FIGURE 1





# FIGURE 2







SAN FRANCISCO BAY REGION  
WASTEWATER SOLIDS STUDY  
ORGANIZATION

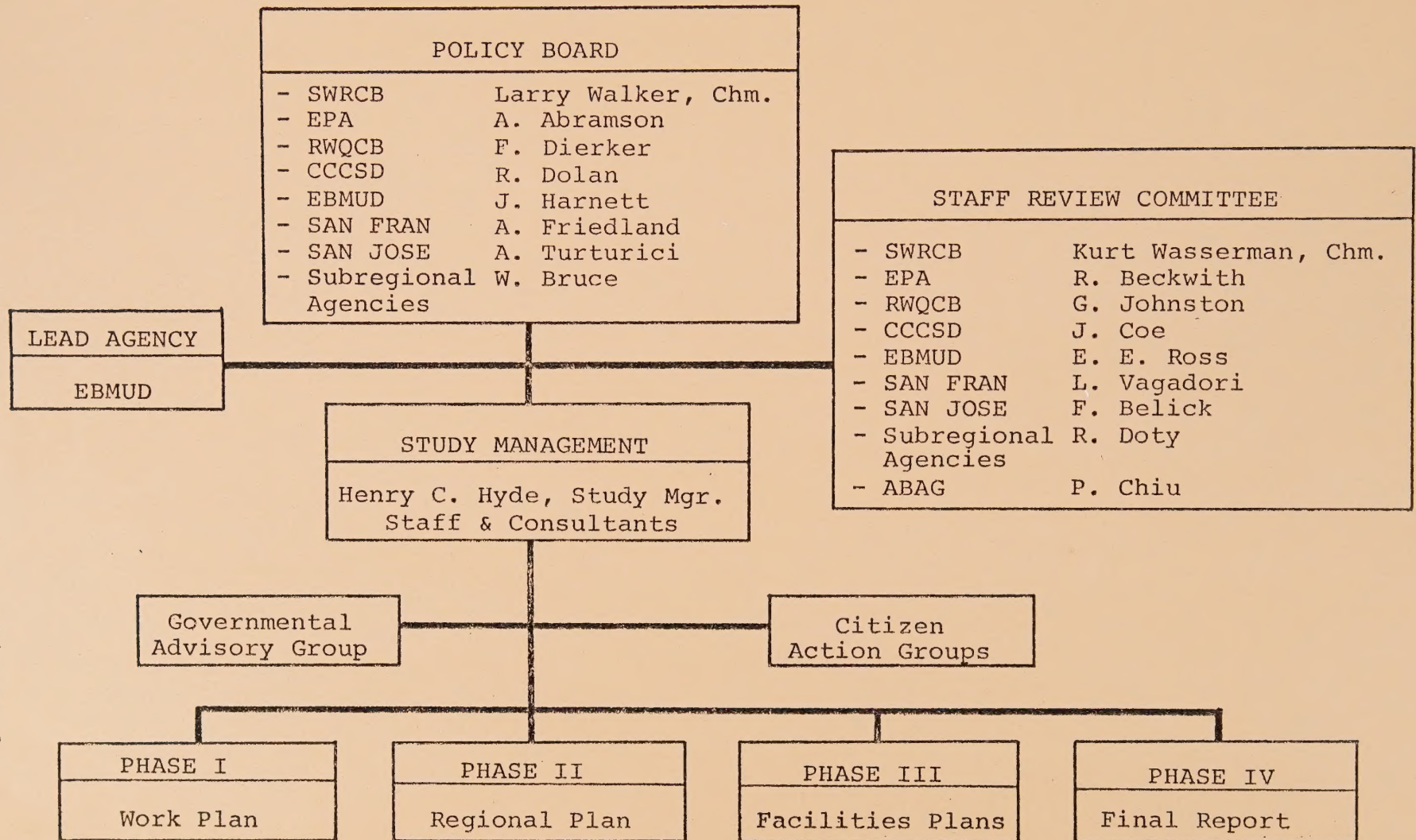


Figure 3





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